THE VETERINARY RECORD

FOUNDED BY WILLIAM HUNTING, F.R.C.V.S., 1888

No. 50. DECEMBER 10, 1949 VOL. 61.

AN OUTBREAK OF HARD PAD DISEASE IN HUSKIES

By

C. E. WOODROW, M.R.C.V.S.

LONDON

On June 13th, 1949, a pack of 31 huskies arrived in this country from the Antarctic (Falkland Islands Dependencies Survey) and entered quarantine in one compound pending their departure in October to join the Norwegian-Anglo-Swedish expedition to Queen Maud Land. Previous experience in the importation to temperate climates of this breed with no inherited or acquired immunity, had shown that it was highly susceptible to bacterial and virus infections. It was therefore decided that the whole pack should be inoculated against distemper with vaccine-virus on the ship, on the way North from the Falkland Islands. The dogs received the vaccine at Monte Video, and virus at Las Palmas 23 days later. Apparently there were no severe reactions, but temperatures were not recorded.

The problem of ensuring that these dogs were immune to distemper was discussed with workers at the Wellcome Research Laboratories. They suggested that under the special circumstances it would be best to test the immunity of the dogs and that a challenge dose of dried distemper virus should be given to each. In view of the value of the dogs and the fact that immunisation had been carried out under unusual difficulties, it was thought advisable to inject live virus into only three dogs in the first place, as a trial of this procedure. Each received the contents of one phial of dried distemper virus on July 2nd, 1949. Temperatures were recorded twice daily for ten days, and close observation kept for a further week, but no reactions were shown.

On July 20th an attempt was made to select eight further dogs to be injected similarly. It was then found that many of the dogs were showing a distinct pyrexia. Eight whose temperatures were within the normal range were selected and each was injected with dried distemper virus on that day. It had been observed for some days previously that a number of dogs had been unduly quiet and off their food, but this had been put down to the excessively hot summer weather. Ever since their arrival these dogs had been exposed to temperatures in the 70's and 80's, having come from a land where for them a hot day was one only eight degrees above freezing point. The dogs were uncomfortable in their thick fleecy coats and were drinking great quantities of water, as much as 2 gallons each per day. They all had loose motions on arrival and this continued throughout, perhaps due to the high water intake. The temperatures of the eight injected dogs and of the other dogs which had shown a rise on July 20th, but which were not of course injected, were recorded twice daily. In five of the eight inoculated dogs there was a distinct rise in temperature within one or two days of injection, a rise too early to be associated with true distemper infection arising from the injected virus (Dogs 1 to 5). In view of the further sharp rise in temperature in Dog 3 and its occurrence on the fourth day, a specific reaction was suspected, and 10 c.c. of distemper serum was injected. On July 25th Dog 5 developed convulsions and died that evening. In an attempt to obtain a quick and definite diagnosis, workers at the Wellcome Laboratories examined the carcase on the following morning and made frozen sections of the foot pads. Lesions characteristic of hard pad disease were seen. (It was reported later that ferrets inoculated with brain emulsion developed symptoms characteristic of hard pad disease.) On this finding, it was decided to use hard pad antiserum, but the recommendation to give the large dose of 1 c.c. per lb. bodyweight could not be followed. Twelve dogs not previously challenged with distemper virus were injected with serum, eight receiving 20 c.c. and four 30 c.c. (six charts only are shown, Nos. 6 to 11).

The position was reviewed at a meeting at the Wellcome Laboratories on August 3rd. The following tentative conclusions were reached:—

1. The outbreak was due to infection with the virus of hard pad disease, which was responsible for the febrile reactions so frequent amongst these dogs on July 20th.

2. The sharp rise in temperature in five of the eight dogs injected with distemper virus on that date was due to this infection.

3. The injection of that virus had favourably influenced the course of the disease in these dogs.

4. The administration of 20 c.c. of hard pad antiserum had not given satisfactory results but that 30 c.c. doses had been of material benefit.

5. The general lack of specific reaction to the injection of distemper virus indicated that the dogs were immune to distemper.

It was decided that larger doses of serum, more in keeping with the original recommendation of 1 c.c. per lb. bodyweight, be administered in some cases and that in others the effect of injecting distemper virus be observed. It was felt that some form of " interference phenomenon " might explain the fact that the virus-injected dogs had suffered less than their fellows.

For this therapeutic use of distemper virus, the Wellcome Research Laboratories supplied freshly prepared emulsions of virus containing dog spleens and suggested that these emulsions be injected in 10 c.c. amounts.

Three dogs were injected with doses of 50 to 70 c.c. hard pad antiserum ; in one case the response was dramatic (Dog 6), and in two (*e.g.*, Dog 7) the serum did not appear to influence the course of the disease. Thirteen dogs all already showing temperature reactions and other symptoms

suggestive of "hard pad disease" received living distemper virus on August 4th. Of these, ten recovered in a fashion which clearly indicated a therapeutic response to the distemper virus injection (*e.g.*, Dogs 6, 7, 10, 11, 12, 13, 14, 15, 16). Three of the injected dogs died; one (Dog 8) within 48 hours of the injection, while one (Dog 9) was an old bitch which had been very ill on the ship. She had produced a litter of dead puppies and subsequently had run a temperature of over 105° for some days and never regained her normal health.

At the date of writing, September 6th, the outbreak has completely subsided and all the remaining dogs are fit and well. It is, then, possible to reach conclusions as to the outcome of the procedures adopted:—

1. The use of hard pad antiserum did not appear to be of material benefit except where large doses were given.

2. The three dogs first tested for immunity to distemper did not react to the challenge injection of virus. Despite the complication of the appearance of hard pad disease among the eight injected with the challenge dose of virus later, it can be said specific reaction to distemper virus did not occur in six. This might well be accepted as indicating that these dogs had been successfully immunised although it is appreciated that response to the injection of prophylactics is not always uniform.

3. Of the three dogs first challenged with distemper virus, two remained quite fit despite the constant and immediate contact with sick dogs. The third was a sister to one of the dogs that died, and nursed him throughout, washing his eyes and nose, and even vomiting food for him to eat. In consequence she developed fairly severe symptoms herself and later received a further injection of living virus to clear up the remaining symptoms.

4. Of the eight dogs challenged with distemper virus at a time when they were in the incubative stage of hard pad disease, two never appeared to be affected, one died within five days, and five made a good recovery.

5. Of the 13 dogs obviously affected and treated by the injection of distemper virus, three died, one within 48 hours, and one an ailing bitch, while ten made a full recovery.

6. Four dogs were seriously affected some time before the decision to use distemper virus for treatment, and all four died.

7. Four bitches whelped during the period, and all four developed hard pad disease. All members in two of the litters died with encephalitis at the age of three weeks; the third litter was older and each of the five members received 10 c.c. hard pad antiserum at the age of seven weeks, but all developed encephalitis and died or were destroyed. In view of the supposed immunity of young puppies to distemper virus, it was decided to risk the injection of live virus and all four members of the fourth litter received 1 c.c. virus at the age of two weeks. One only developed encephalitis; the remaining three survive and appear normal.

8. At the time of this outbreak there was a number of young dogs in kennels adjacent to the huskies' compound, and these were given 5 c.c. each distemper vaccine. If any had developed symptoms of hard pad disease during the four weeks following the vaccine injection, live distemper virus would have been injected, but there was no further spread of hard pad disease outside the compound except in one dog aged two and a half years which had not received vaccine. This dog (No. 17) developed pyrexia with profuse diarrhoea on August 13th and was given 10 c.c. distemper serum on that day. Later when the temperature rose again with symptoms suggestive of hard pad disease including the intense congestion of the sclera, he was injected with distemper virus. The chart shows the rapid return of this case to normal.

9. Where the injection of virus failed to reduce the temperature to normal (Dogs 7 and 16) or where the disease continued in a mild form for many days (Dogs 4 and 15), a second injection of virus was given and the return to normal was dramatic.

10. While the temperature charts give some fair indication of the therapeutic benefit of the distemper virus injections, the clinical improvement was quite remarkable. It is difficult to convey the feeling of confidence that grew amongst all those associated with the handling of the pack. After the initial high losses and before the therapeutic use of distemper virus a loss rate of 80 per cent. seemed likely, and, in fact, arrangements were started to collect a further supply of dogs from Greenland. As the results of the injection of the 13 clinical cases became apparent, it was possible to forecast with accuracy both the number of dogs which would survive and the date when the outbreak would have subsided completely, such was the confidence in the distemper virus treatment. For three weeks the pack had been silent and listless, with eyes and nostrils caked with discharges; a fortnight later their eyes were bright, the great wolf howl had come back on a moonlight night, and they were using up their regained energy in daily roaring pack fights.

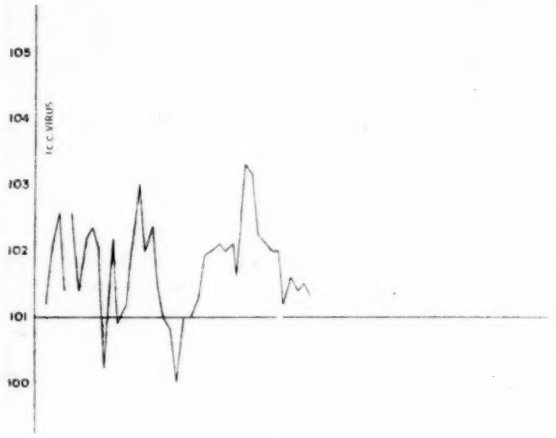
11. The loss of eight adult huskies from a total of 31 may appear unduly high in view of the decreasing severity of hard pad disease amongst English dogs, but as affecting these fresh dogs it should be compared with the losses some two years ago, and the husky is a dog notorious for its susceptibility to virus infection. Two previous records may be quoted. In the winter of 1934, 61 huskies were collected from Greenland and shipped on the British Grahamsland Expedition ship to the Antarctic. Distemper developed on board and only eleven dogs survived. To replace these dogs, more were collected from Labrador and were shipped by merchant ship to Liverpool where they were immunised against distemper on board before proceeding South. In the winter of 1946 Commander Finn-Ronne shipped 36 huskies from the camp at Wonalancet, New England, for the Antarctic *via* the West Coast of South America. Although arrangements had been made to inoculate these dogs before leaving camp, this was not done as time was short. Distemper broke out on board and nine only of the 36 dogs arrived.

Acknowledgments.—To the workers at the Wellcome Research Laboratories for their critical analysis and vital suggestions during the course of this outbreak and for the supply of antiserum and distemper virus.

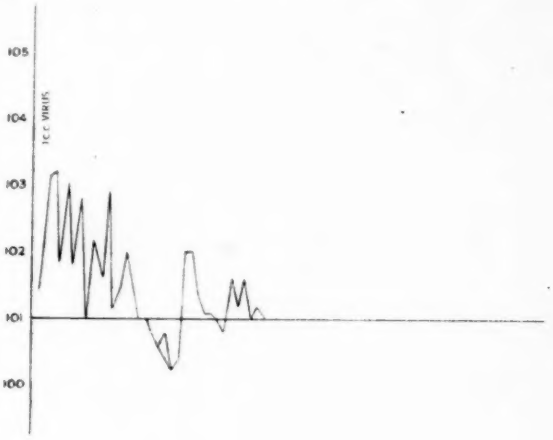
To Mr. Bill Thomas, who brought this pack back from the Antarctic and who has been in charge of the dogs throughout their stay in this country. It was no light task in itself to record twice daily 20 to 30 temperatures in a dog as powerful as a huskie.

TEMPERATURE CHARTS

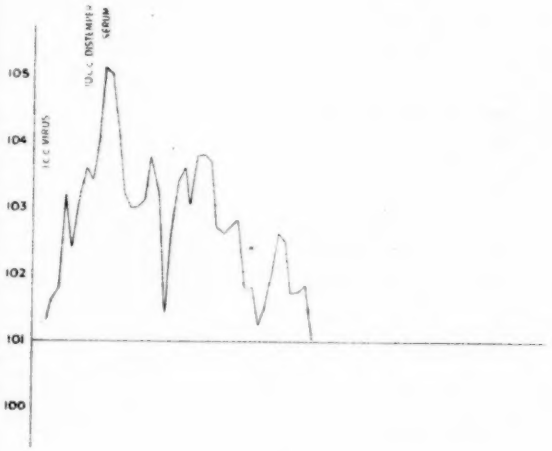
(Temperatures are bi-daily except where noted)



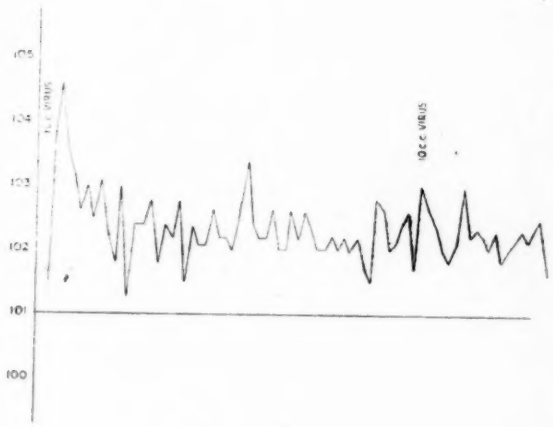
1



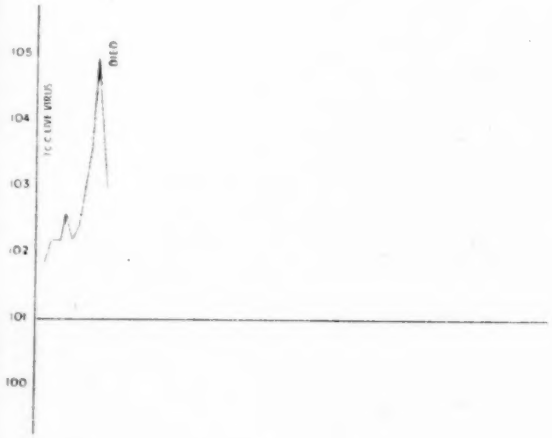
2



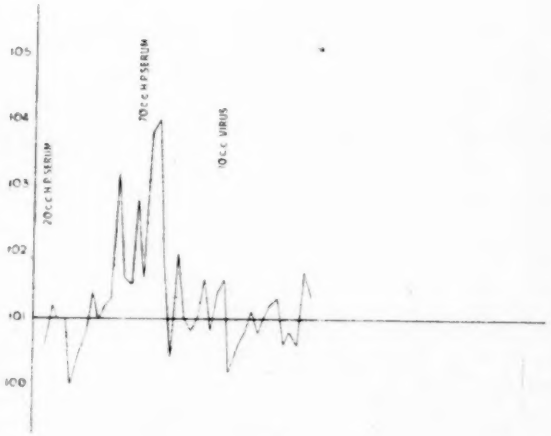
3



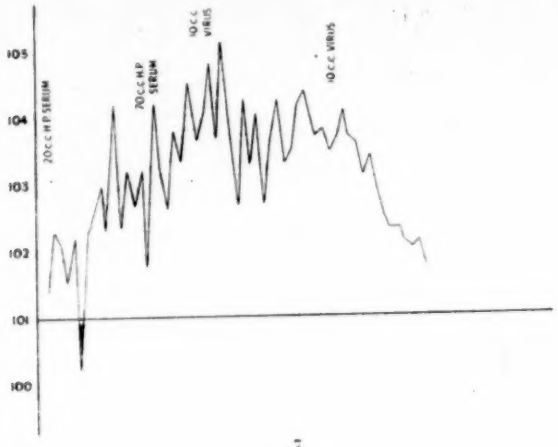
4



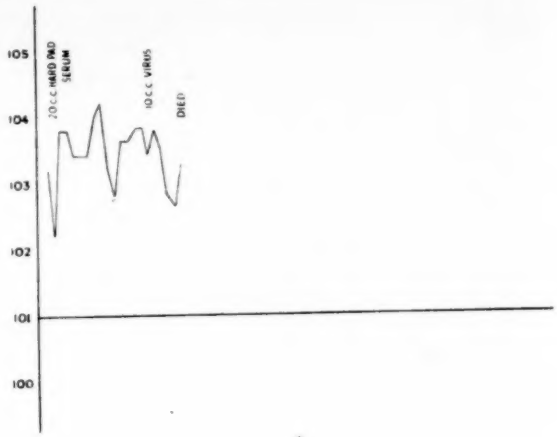
5



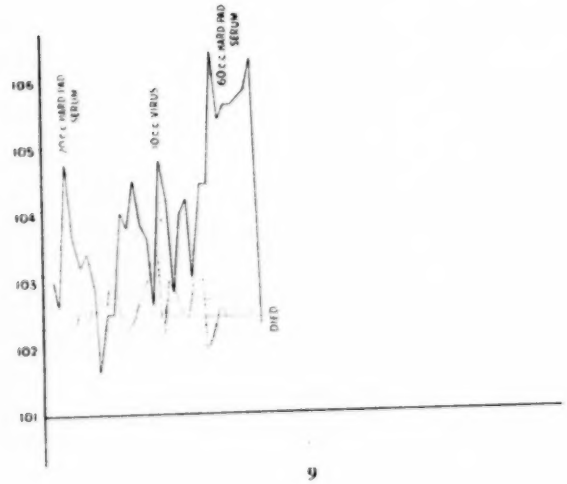
6


20CC H.P SERUM
20CC H.P SERUM
10CC VIRUS
10CC VIRUS
105
104
103
102
101
100

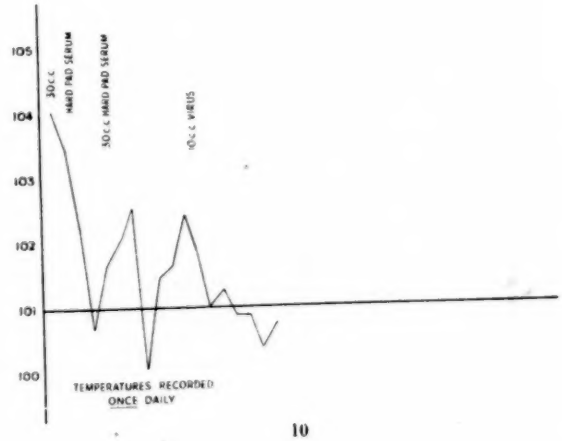
7


20CC HARD PAD SERUM
10CC VIRUS
DIED
105
104
103
102
101
100

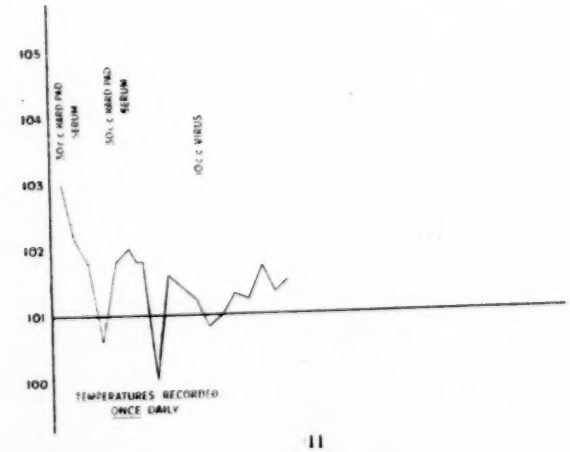
8


20CC HARD PAD SERUM
10CC VIRUS
60CC HARD PAD SERUM
DIED
106
105
104
103
102
101

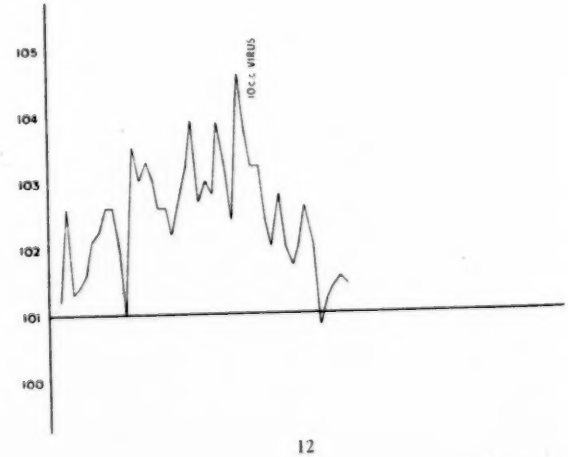
9


30CC HARD PAD SERUM
30CC HARD PAD SERUM
10CC VIRUS
TEMPERATURES RECORDED ONCE DAILY
105
104
103
102
101
100

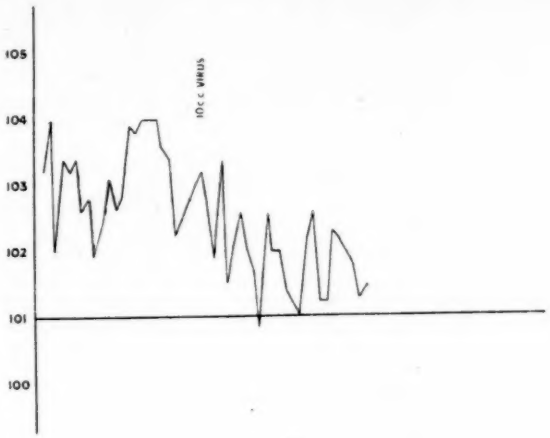
10


30CC HARD PAD SERUM
30CC HARD PAD SERUM
10CC VIRUS
TEMPERATURES RECORDED ONCE DAILY
105
104
103
102
101
100

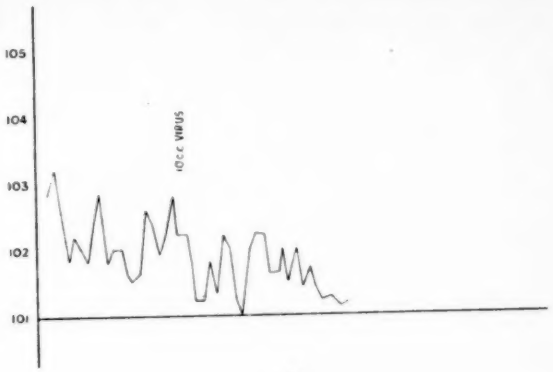
11


10CC VIRUS
105
104
103
102
101
100

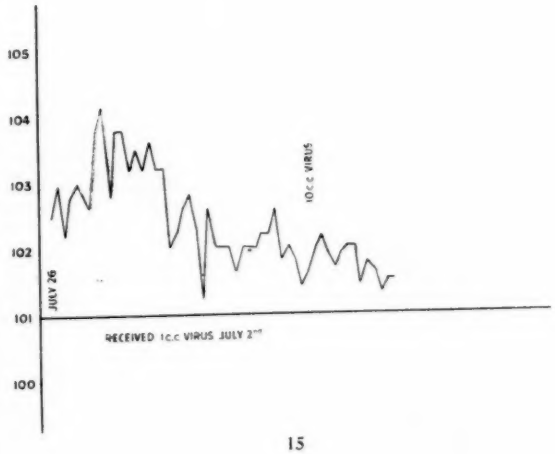
12


105
104
103
102
101
100
VIRUS

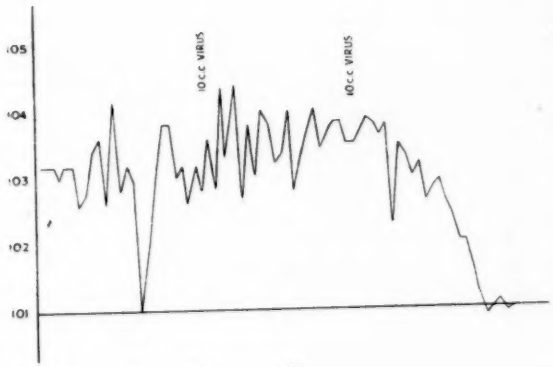
13


105
104
103
102
101
10 c.c VIRUS

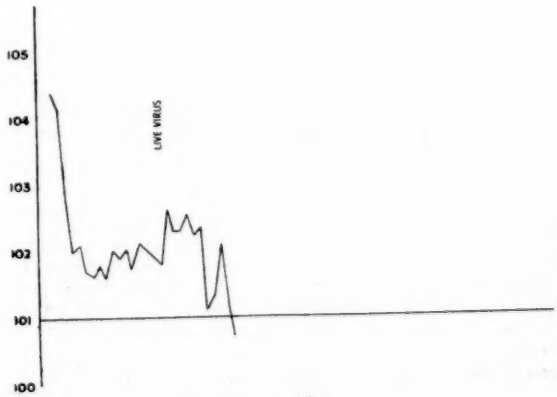
14


105
104
103
102
101
100
JULY 26
10 c.c VIRUS
RECEIVED 1 c.c VIRUS JULY 2nd

15


105
104
103
102
101
10 c.c VIRUS
10 c.c VIRUS

16


105
104
103
102
101
100
LIVE VIRUS

17

SOME OBSERVATIONS ON THE USE OF "C.F.9" IN THE TREATMENT OF HARD PAD DISEASE IN DOGS

By

W. BRIAN SINGLETON, M.R.C.V.S.,

KENSINGTON,

and

ROBERT POTTER, M.R.C.V.S.,

CAMBERLEY

The drug "C.F.9," the exact nature of which is still undetermined, was produced by research workers of Edenhall Clinical Research Laboratories.

After very promising *in vivo* experimental trials on plants it was suggested by the authors that the drug might be used against the virus producing hard pad disease in dogs, and material for trials was made readily available by the Edenhall Laboratories.

It is felt that the results so far obtained are rather favourable, and whilst no claims are being made regarding any specific anti-viral action, we feel that a new approach to the treatment of hard pad disease has presented itself and warrants a fuller and broader investigation by practitioners and research workers.

The results of our investigations are recorded below, and in order to avoid repetition we have set out briefly the symptoms leading to a diagnosis of hard pad and have attempted to place them into four categories based primarily on the symptoms first observed when examined and the duration of illness, although the latter information in some cases has been misleading as the owners failed to observe the very early symptoms.

SYMPTOMS

Early Stage (one to seven days' duration)

Slight to moderate tonsillar enlargement, with possible enlargement of the submaxillary lymph glands, also mild laryngitis, causing a husky cough. Anorexia, listlessness, diarrhoea, occasional vomiting. Temperature very variable but usually between 103·5° and 105°.

Less commonly a change of temperament was noted, the animal being slightly more affectionate with its owner but more nervous when outside or with strangers.

Middle Stage (eight to 21 days' duration)

Periods of health alternating with above symptoms, possible congestion of the lungs, appetite very variable, some hardening of the pads, usually commencing around the edges. Lymphatic glands in the head region enlarged but not painful. The prescapular and popliteal lymph glands frequently enlarged and painful for several days. Temperature usually 102·5° to 103·5°.

Last Stage (beyond three weeks' duration)

No nervous symptoms. At this stage the animal frequently is extremely emaciated. Nostrils and pads are usually hard and cracking, appetite usually poor but a sudden voracious appetite often follows a period of anorexia; this change usually precedes the onset of nervous symptoms by three to four days. Extreme listlessness often is noted, also excessive scurfiness of the skin.

Last Stage (beyond three weeks' duration)

Serious involvement of the nervous system: mild to violent fits, paralysis, chorea, blindness. Frequently before the fits commence there appears to be a progressive involvement of the third and sixth cranial nerves, later the 7th and eighth (usually vestibular branch). Pads frequently hard and peeling.

GENERAL TREATMENT

In all cases seen and diagnosed early hard pad serum was advised and given when this was within the owner's means. Apart from serum and "C.F.9," the following measures were adopted as routine.

Diet normal but with as much protein as possible, all dog biscuits stopped and the animal fed on wholemeal bread in their place. Vitamin B or B complex or brewer's yeast added to the diet.

Aspirin/phenacetin/caffeine tablets *t.i.d.*

Penicillin parentally if lung involvement.

Phthalylsulphathiozole, creta prep., kaolin used in the treatment of the diarrhoea.

Liver extract orally or parentally if nervous symptoms were present or appeared imminent.

Sedatives were used as little as possible. Aspirin was always the first choice; later, pot. brom. or phenobarbitone.

An anthelmintic was given in early cases, after egg counts had been made.

CASE REPORTS

CASE NO. 1

Cocker Spaniel bitch, aged ten weeks

1.1.49.—Purchased from a pet-shop and given 10 c.c. anti-distemper serum as a prophylactic measure.

10.1.49.—Early symptoms of hard pad noted. General treatment was given until 28.1.49, by which time the condition of the dog had deteriorated tremendously, the main symptoms being profuse diarrhoea, emaciation, scurfiness, glandular enlargement. Treatment with "C.F.9" was commenced, and 2 c.c. were injected intramuscularly every 12 hours until 31.1.49, by which time all symptoms had cleared except for glandular enlargement. Continuous progress was maintained, and in seven days the dog was gaining weight rapidly. Complete recovery resulted.

CASES NO. 2 AND 3

Cocker Spaniels, dog and bitch, aged three months

22.1.49.—Both these puppies were owned by the same person. These animals were first seen in the late middle stage of hard pad, the main symptoms being cough, diarrhoea, anorexia, emaciation. Following a dose of anthelmintic, 1·5 c.c. "C.F.9" were injected every 24 hours. By the time the fifth and last injection had been given all the major symptoms had cleared except for the cough, which gradually improved. Later, one of these animals developed chorea, which responded to treatment. Both are now in good health.

CASE NO. 4

Cocker Spaniel bitch, aged eleven months

19.3.49.—Symptoms in this case had been noted for seven days: Cough, ocular discharge, diarrhoea, anorexia, T. 103·5; 1·5 c.c. "C.F.9" injected. No other treatment was given in this case.

21.3.49.—Diarrhoea cleared, other symptoms persisting; 1·5 c.c. "C.F.9" injected. Temperature, 102·5°.

23.3.49.—Only slight cough persisting. Uneventful recovery.

CASE NO. 5

Poodle dog, aged three and a half months

21.3.49.—This case was possibly of only 48 hours' standing. Cough, diarrhoea, ocular discharge. Temperature, 104°; 1 c.c., 1·5 c.c. "C.F.9" injected. Diagnosis in this case was strengthened by the fact that the puppy had been in contact with hard pad several times during the previous three weeks.

23.3.49.—Completely fit. No relapse.

CASE NO. 6

Cocker Spaniel dog, aged ten months

1.4.49.—This animal was in the early middle stage of the condi-

tion. It had been inoculated against distemper (vaccine-virus) in October, 1948. When first seen the main symptoms were cough, diarrhoea, ocular discharge. Temperature, 105°; 2 c.c. "C.F.9" I/M.

2.4.49.—Improved; diarrhoea cleared, appetite returning; 2 c.c. "C.F.9."

4.4.49.—Only slight cough persisting, temperature normal, ocular discharge clear, appetite good. Recovery uneventful.

Case No. 7

Mongrel dog, aged one year

4.4.49.—Tonsillitis, laryngitis, vomiting and diarrhoea were the main symptoms observed in this case and had been present for three days. Temperature, 104°; 2 c.c. "C.F.9" were injected.

5.4.49.—Marked improvement. No vomiting, slight diarrhoea. Temperature, 102·5°; 2 c.c. "C.F.9" injected.

6.4.49.—All symptoms cleared; 2 c.c. "C.F.9." In this case no other treatment than "C.F.9" was used.

Case No. 8

Chow dog, aged ten weeks

7.2.49.—Hard pad of at least six weeks' standing; all the symptoms of the late stage were present, with early signs of encephalitis; 2 c.c. "C.F.9" were injected every six hours but no response was obtained and the puppy was destroyed 48 hours later.

Case No. 9

Golden Cocker dog, aged six months

2.3.49.—This animal was in the late stage of the condition and had had one attack of hysteria and one short epileptic fit. Temperature, 105°; 200,000 I.U. penicillin were administered, also 2 c.c. "C.F.9" I/M.

3.3.49.—Temperature, 101·5°. Cough very severe, pads hard; 200,000 I.U. penicillin, also 2 c.c. "C.F.9."

4.3.49.—No change. Treatment as before.

8.3.49.—Appetite excessive; no change otherwise; 2 c.c. "C.F.9."

9.3.49.—Hysteria and every indication of developing encephalitis; 2 c.c. "C.F.9" plus a mild sedative.

10.3.49.—Fits incessant. The animal was destroyed.

Case No. 10

Dachshund bitch, aged six months

20.5.49.—Although this animal could be said to be in the late stage of hard pad, the symptoms were mild—a slight cough, diarrhoea, vomiting; occasionally changes in temperament were marked, the animal being extremely nervous and bad tempered with strangers, whereas before the onset of the illness the temperament was excellent. When first seen the temperature was 102·5°; 2 c.c. "C.F.9" injected.

22.5.49.—Diarrhoea cleared, no cough, still listless. Temperature, 102·5°.

24.5.49.—No change apart from increased ocular discharge and increased nervousness.

26.5.49.—Ocular discharge improved. Temperature, 101·5°.

28.5.49.—Decided improvement, which has been maintained since, except for a period of 14 days when a slight paraplegia developed, but this has now almost disappeared. The temperature has returned almost to normal.

At each visit 2 c.c. "C.F.9" were injected I/M. Vitamin B complex was administered throughout.

Case No. 11

Retriever dog, aged six months

10.3.49.—Typical early hard pad, with all symptoms except diarrhoea. Routine treatment.

11.3.49.—"C.F.9" 1·5 c.c. I/M.

17.3.49.—Injection of "C.F.9" every second day. A steady improvement was maintained except for the submaxillary glands, which remained enlarged.

8.4.49.—Slight diarrhoea; pads very hard and cracked.

15.4.49.—Slight chorea in right hind leg, which has persisted but otherwise the pads peeled and the dog gradually improved.

Case No. 12

Black Cocker bitch, aged four months

20.2.49.—Typical early hard pad. Temperature, 103·4°; 10 c.c. hard pad serum injected.

22.2.49.—Dog livelier, but otherwise as before; 5 c.c. hard pad serum injected.

1.3.49.—Apparently normal.

10.3.49.—Relapse to all previous symptoms; pads hardening; 1·5 c.c. "C.F.9" I/M.

These injections were continued until 12.3.49, by which time some improvement had occurred, although diarrhoea persisted. Phthalylsulphathiozole cleared this in two days and a gradual improvement was maintained up to 28.3.49, when the dog was severely scalded on the right side of the head.

Seventy-two hours after this occurred, epileptic fits commenced, and the dog was destroyed.

Comments.—Similar occurrences have been noted in other dogs which have, apparently, recovered from hard pad, but a sudden shock, with trauma, has caused the onset of fits in a short time.

Case No. 13

Alsatian bitch, aged nine months

17.2.49.—Typical early hard pad. No diarrhoea; 15 c.c. hard pad serum, which produced a rapid improvement.

1.3.49.—Listless; 10 c.c. hard pad serum injected. Routine treatment commenced; conjunctivitis marked. This stage continued until 16.3.49, when treatment with "C.F.9" was commenced. By 22.3.49, the dog was almost normal except for enlargement of the submaxillary glands. No further deterioration occurred, and the animal is now quite well.

Case No. 14

Smooth Fox Terrier bitch, aged eight months

3.3.49.—Apparently suffering from early hard pad. Two other puppies in the same litter all had enlarged glands. Tonsillar swabs were taken from all three animals, but these proved to be negative to bacterial infection. A course of penicillin was given whilst culturing of the swabs was taking place, to the three puppies, but no improvement occurred. Treatment with "C.F.9" was commenced on the bitch in question on 15.3.49.

17.3.49.—Marked improvement noted, but submaxillary glands still enlarged.

25.3.49.—This bitch had, apparently, recovered; the other two pups also were normal.

5.4.49.—Epileptic fits commenced, which continued till the 12th, when the bitch was destroyed.

Case No. 15

Airedale dog, aged twelve months

12.3.49.—Typical hard pad—in the early stage, but with no diarrhoea; 15 c.c. hard pad serum administered, which had an immediate effect, and the dog was, apparently, normal in 48 hours.

26.3.49.—Complete relapse; temperature, 105·5°. Routine treatment commenced, also 1·5 c.c. "C.F.9" each day for four days, by which time the dog was quite normal except for enlargement of the submaxillary glands, which remained enlarged for some time.

Case No. 16

Mongrel dog, aged eight months

29.3.49.—Middle stage of hard pad; 2 c.c. "C.F.9" given each day for three days.

6.4.49.—Diarrhoea and cough cleared, but still not interested in food. A further course of "C.F.9" was given, also Collotone to improve the appetite. A steady improvement was maintained.

Case No. 17

Retriever bitch, aged six months

19.3.49.—Typical early hard pad, but with hysteria; 15 c.c. hard pad serum. Routine treatment.

23.3.49.—Improvement marked; glandular enlargement still persisting.

10.4.49.—Slight relapse to previous stage; more hysteria; 2 c.c. "C.F.9" administered each day for three days, which brought about a quick recovery.

Case No. 18

Labrador dog, aged three years

3.5.49.—Middle stage of hard pad. Temperature, 103·5°. Anorexia, emaciation. Routine treatment produced no effect.

7.5.49.—2·5 c.c. "C.F.9" I/M; the dog commenced to eat in a few hours. A similar injection was given each day for four days, by which time the dog was normal except for glandular enlargement. The pads, which had hardened in this case, commenced to peel and returned to normal.

Case No. 19

Mongrel bitch, aged 18 months

7.5.49.—For four weeks this animal had lost weight progressively, and on questioning the owner it was found that many of the symptoms of hard pad had been in evidence during that time. When first seen, diarrhoea, vomiting and emaciation, with a temperature of 102·5°, were the main symptoms. Three injections of "C.F.9" were given every other day, and in seven days there was a marked improvement, which was maintained.

Case No. 20
Labrador dog, aged nine months
History of distemper, responding to anti-distemper serum in December.
11.5.49.—Typical early hard pad, with cough, diarrhoea, ocular discharge, anorexia. Routine treatment, also 2 c.c. "C.F.9."
12.5.49.—No change; 3 c.c. "C.F.9" I/M.
13.5.49.—Diarrhoea cleared, appetite improved; 3 c.c. "C.F.9" I/M.
19.5.49.—Quite normal; no relapse.

Conclusions

This drug does appear to have a beneficial effect upon dogs affected with hard pad disease. In certain cases, especially early ones, this effect is almost spectacular. Dogs in the middle stage appear to respond, although as pointed out previously, other drugs have usually been used with "C.F.9" and it is difficult to say what effect "C.F.9" alone had upon the final outcome; we feel, however, that when compared with the result we obtained before "C.F.9" was available the number of recoveries is much greater, also the incidence of nervous complications following this middle stage is considerably less.

In late stage cases the effect is doubtful and the drug certainly is quite useless in cases with severe nervous complications.

The writers appreciate the limitations of this paper from a purely scientific point of view, inasmuch as all diagnosis was made purely on clinical observations, but running concurrently with the above cases other dogs showing very similar symptoms were allowed to proceed without treatment with "C.F.9." With many of these dogs the full hard pad syndrome developed and few recovered.

Table showing the Stage at which Treatment with "C.F.9" was commenced in the Treatment of Hard Pad Cases, and the subsequent Results

Stage of the disease	Number	Recoveries	Failures
Early stage	11	9	2*
Middle stage	5	4	1
Late stage (no nerve symptoms)	2	2	—
Late stage (nervous) ...	2	1	1
Total	20	16	4

* Cases Numbers 12 and 14

[It is understood that, although this drug ("C.F.9") is at the moment in very short supply, and production presents difficulties, the Edenhall Clinical Research Centre are prepared to make small supplies, free of cost, available to a limited number of practitioners for the purpose of furthering investigations.]

After visiting a number of veterinarians and clinics in England, Dr. M. L. Morris states (*Popular Dogs*, October, 1949) that "Americans accustomed to plenty simply cannot understand or appreciate the tremendous difficulties facing the dog-owner in Great Britain. . . . My conclusion after examining the problem carefully was that the major deficiency in dogs and cats was, first, that of fat; second, protein, and third, vitamins, both A and B complex. The energy value of such rations (bread, potatoes and a small amount of green stuff, such as cabbage leaves, kale, or similar forage) is low, thus considerable quantities of food must be consumed by the animal for adequate nourishment."—*N. Amer. Vet.*

* * * * *

Weekly Wisdom

A student of philosophy who cannot fill his generalisations with the living experience of contemporary society is wasting public money and his own time. A primary function of any institute of higher learning is surely to lead students to play their specialist part, with understanding and with sensitivity, in life as it is lived.—H. Levy, Dean of the Royal College of Science, contributing to *The Times* correspondence on Science and the Humanities.

SUSPECTED MONILIASIS IN TURKEYS*

By

A. BUXTON, C. le Q. DARCEL, R. F. GORDON

and C. HORTON SMITH

Animal Health Trust Poultry Research Station, Houghton, Huntingdon

A recent severe outbreak of disease, associated with the presence of a fungus, was encountered among turkey poults on a general farm in Norfolk where a very high death-rate had occurred for several months before we were invited there for consultation.

The poults were hatched in small cabinet incubators and half were reared for three to four weeks in wire-floored batteries, and half under broody hens; they were then transferred to night arks on a grass meadow. The history of the disease showed that deaths first occurred among three to four weeks old poults in the batteries and continued until five to eight weeks of age when the birds were on the field; survivors of the disease remained in extremely poor condition. As there was evidence of slipped tendon, a condition which had been present for several years, their diet had been changed a number of times. By the time we visited the farm the incidence of slipped tendon was low but that of the present disease was high.

The clinical symptoms included drawing back of the head, spasmodic muscular tremors, leg weakness, and a

Mycelium in the epithelium of the crop.

* Received for publication November 1st, 1949.

backward staggering gait on the hocks. *Post-mortem* examination showed tnat the crop was the seat of the infection. The crop wall was thickened and covered with scattered areas of sloughing, with elevated and well-defined circular necrotic areas with minute, centrally-placed pits. Scrapings from these lesions, when examined under the microscope, revealed the presence of necrosis and mycelia (see accompanying photograph).

Histological study of the lesions showed necrosis and characteristic proliferation and desquamation. The fungus was found in the areas of maximum proliferation.

Material for cultures was obtained from the crop lesions and transferred to Saboraud's agar plates. After 18 hours' incubation at 37° C., profuse, confluent growth developed along each needle track. Colonies were obtained from subcultures on to Saboraud's agar after 18 hours' incubation at 37° C. or after 48 hours at room temperature. The colonies were raised, of a moist, creamy consistency, were greyish-white in colour, and of approximately 1·5 to 2·0 mm. in diameter with entire edges. Microscopical examination of unstained preparations revealed masses of yeast-like cells, many of which showed budding. No hyphae were observed. Cultures were sown from glucose agar into glucose acid broth and incubated for 48 hours ; there was no surface growth. These preliminary findings suggest that the fungus is probably of the genus *Candida*. Benham[1] reported that *Candida albicans* was toxic to rabbits so a further test was made by taking 1·0 ml. of saline suspension of approximately Brown tube opacity five of suspected *Candida* on Saboraud's agar and inoculating intravenously into each of two rabbits. One rabbit was killed *in extremis* at the end of 48 hours ; the other died after 72 hours. A pure heavy culture of suspected *Candida* was obtained from the kidneys. The *post-mortem* examination showed enlarged heart, ischaemic kidneys with granular surfaces covered with numerous white localised elevations, haemorrhagic lungs, highly congested liver and spleen and the presence of blood-stained fluid in the abdominal cavity. Whilst the other organs showed marked vascular engorgement and local haemorrhages, the kidneys appeared to be the predilection site for the fungus.

Microscopically, the kidneys exhibited numerous local areas of proliferation of yeast-like cells with hyphae radiating into the surrounding kidney tissue. These observations indicate that the fungus isolated from the turkey poults was probably *Candida albicans*.

In America, Jungherr[2] has reported the occurrence of moniliasis in chickens and wild game birds[3] and Hinshaw[4] and others have described the disease in both turkeys and chickens. We believe that the case we now record is the first known outbreak of the disease in Great Britain.

More detailed examinations of cultures are being made to confirm the specific identity of the fungus and further transmission experiments are planned with a view to determining the true status of this fungus as a possible pathogen, its aetiology, and control. We hope to publish the full account of our findings in due course.

References

[1] Benham, R. W. (1931.) *J. inf. Dis.* **49**. 183.

[2] Jungherr, E. (1933.) *J. Agr. Res.* **46**. 169.

[3] ——. (1933.) *Storr's Agr. Exp. Sta. Bull.* No. 188.

[4] Hinshaw, W. R. (1933.) Fifth World's Poultry Cong. Paper 97. 190.

THE VETERINARY RECORD
December 10, 1949

THE REPORT OF THE JOINT B.M.A.-N.V.M.A. COMMITTEE

THE report of the Joint Committee of the B.M.A. and the N.V.M.A., reproduced in this issue, should be judged against its background as an event and not alone on its intrinsic merits. Contacts between the two professions in various fields cannot fail to become more fruitful as a consequence of this close combination in one of them. The efforts of the Joint Committee are directed towards the formulation of a common policy in relation to foods of animal origin, starting with milk, and the present statement is of an interim nature. The representatives have met on several occasions and have found agreement on the many aspects of the subject upon which both sides are competent to express views. There are many matters which fall to one side or the other of this common ground. Upon these we believe that an atmosphere of understanding has been created which portends favourably for future deliberations.

The report itself bears evidence of multiple authorship which does not make for easy reading. Veterinary surgeons who find in it paragraphs which appear to labour the obvious should realise that it is not designed only for their consumption. In comparison with others to whom the report may be published, a very large proportion of the profession has occasion to familiarise itself with the law, the administrative machinery and the technicalities relating to milk.

Until 1938, the Ministry of Health, the Government Department which regulates the work of local authorities, was the central body interested in the milk industry. At that time the Ministry of Agriculture came into the field with the transfer to it of some of the functions and veterinary staffs of local authorities. During the war, the creation of the Ministry of Food added a third Ministry. It was inevitable that there would have to be a sorting out of responsibilities and legislation has been passed with that effect. As the committee points out, the tendency now is to " classify milk as an agricultural product to the neglect of its significance as a food in relation to health ". All the committee's observations revolve around this point of principle which, they feel, is not in the best interests of the community. The weight of criticism, however, is not against the legislative measures but is directed towards the administrative procedure for implementing them. On the production side of the industry, the statutory registration, licensing and general supervision of farms is taken over by County Agricultural Executive Committees, each delegating the routine work to a Milk Sub-Committee. In addition, Milk Advisory Committees are being formed, also at county level, whose function is to keep the general administration under review, quite independently of the Executive Committees, and to report to a Central Advisory Committee. Veterinary surgeons are being appointed to each of these committees in each county. The demands of the Milk Sub-Committees will be heavy, particularly at this early stage, but we urge our members to make an effort to give their time and abilities in the service of these important bodies. Veterinary Officers of the Animal Health Division are expected to attend but have not the status of full membership.

Perhaps this system of rule by committee is a mani-

festation of democracy but progress would have been more uniform and better assured if the policy declared in the White Paper, " Measures to Improve the Quality of the Nation's Milk Supply " had been implemented and the Ministry's Animal Health Division had been given the responsibilities. Executive duties directly governing the health of cattle still remain with that organisation, but its officers have no standing in control of environmental factors. We are advised that, with a comparatively small reinforcement of technical and clerical staff, the Animal Health Division could have undertaken the whole of the work now spread over a vast organisation of committees and officers.

The Joint Committee recognises the need for securing greater uniformity throughout the country than has obtained in the past, but expresses apprehension that there may be a levelling down under the present plans. It should be noted that Scotland is not affected and it may well be that that country can benefit from the experience gained during the next year.

The report notes with disfavour the relegation of the Minister of Health to the role of junior partner. While the new regulations still permit local authorities to exercise some supervision of the safety of milk by sampling and testing, the Joint Committee takes the view that this is hardly adequate and suggests that the whole of this work should be unified, operating through medical officers at county and county borough levels and actively co-ordinated by the Ministry. The word " quality " in relation to milk has a far wider connotation than is measurable by the methylene blue reduction test, upon which price regulation some day may be based. Sampling at all stages from the farm to the household and testing by various methods constitute a public health service of some magnitude, not well designed to be cut up into small separate compartments.

There are many observations in the report which have an appeal particularly to veterinary surgeons, whose work and direct interests lie at the source of the nation's milk supply. There are others which deal with entirely different spheres. Whatever the defects of the report, it has the great merit of being the statement, not of two sides, but of one team.

ROYAL SANITARY INSTITUTE MEETINGS

The following are among forthcoming meetings arranged by the Institute:—

London Sessional Meetings.—(1) Wednesday, January 11th, 1950, at 2.30 p.m., at the Institute (90, Buckingham Palace Road, S.W.1), Discussion on "Modern Sophistication of Certain Foods," to be opened by Eric Voelcker, A.R.C.S., F.R.I.C. Chairman: Dr. Charles Porter (Vice-President). (2) Wednesday, February 15th, 1950, at 2.30 p.m., at the Institute. Discussion on "Developments in the Bacteriological Testing of Milk," to be opened by J. G. Davis, PH.D., D.SC., F.R.I.C., Scientific Adviser, Express Dairy Co., Ltd. Chairman: Sir Weldon Dalrymple-Champneys, BT. (Deputy Chairman of Council).

* * * * *

DUTCH CATTLE CENSUS

The autumn cattle census in the Netherlands shows a satisfactory increase of about 10 per cent. over that of last year, and now approaches the pre-war figure. Total stock is now 2,542,322 compared with 2,229,178 last year and 2,733,000 in the autumn of 1939. The number of milch cows and calf has increased during the year by 124,000 to 1,499,938, and the number of young cattle under one year is more than in 1939.

Pig stock has risen by 530,000 since last autumn, and is now 1,765,685. This is about 75,000 more than in 1939. There is an encouraging rise in the number of breeding sows which has almost reached the target of 300,000.—*Meat Trades Journal.*

CLINICAL COMMUNICATION

OPERATION TO CORRECT PERINEAL HERNIA, FOLLOWED BY VENTRIFIXATION OF THE BOWEL

WILLIAM HENDERSON, M.R.C.V.S.,

HAMPTON, MIDDLESEX

The subject of these two operations was a cross-bred retriever dog about eight years' old. This animal was brought to me with a unilateral perineal hernia which had been in existence for a year. Euthanasia had been advised by two other practitioners in view of the fact that at exercise the dog strained constantly, and the owner had reached the point where he was afraid to take the animal out in daylight.

The repair of perineal hernia in the dog is not a subject upon which British veterinary text-books are very enlightening, but fortunately the Americans have spoken of its occurrence and surgical correction.

C. L. Blakely, of the Angell Memorial Animal Hospital in U.S.A., says: " Perineal hernia, a failure of the muscular pelvic diaphragm and the perineal fascia to support the pelvic outlet, is a condition seen exclusively in male dogs in the latter half of their life. It is obviously of endocrine origin, as demonstrated by its occurrence only in males and by the necessity for castration to secure the success of surgical treatment."

Blakely says that, among 100 admissions to the hospital, no case has been seen in the female animal ; and that castration is carried out as a routine measure after the herniotomy has been performed. The high percentage of recoveries following surgery makes it clear that the old advice " Give him liquid paraffin ! " will not do to-day.

Pre-operative preparation in this case consisted of giving the dog a high enema on the evening before operation. He already had a " paraffin leak " and no laxative was given. Deep anaesthesia was induced with nembutal. The animal was arranged on the table so that the hind parts were elevated, the body inclining downwards to take the pelvic contents forward. The perineal region was shaved and washed, and a purse string suture closed the anus.

The incision was made through the skin at about the middle of the enlargement and extended both above and below the swelling. The hernial sac was exposed intact, and when incised a large quantity of omental fat came into view in which there was a loop of rectum. Haemorrhage was very slight, but was dealt with as it arose. An enlarged lymphatic gland, quite black in colour due to strangulation and about the size of a butter bean, was ligatured and excised. The omental fat and the loop of bowel were then pushed forward.

To close the hernia the suture used was No. 3 nylon. Catgut is favoured in the U.S.A., where the technique is to suture the coccygeus muscle, the sacro-sciatic ligament and the obturator muscle on one side to the internal anal sphincter on the other. I relied here, as in other cases done successfully, on the perineal fascia alone to hold the sutures. This fascia is attached anteriorly along the sacro-sciatic ligament and medially to the external anal sphincter, and a good closure can be made with the nylon sutures placed close together. Apposition of the skin wound followed, the redundant skin being cut away, and the suture removed from the anus.

The dog came round uneventfully, but three days later straining was as bad as ever, if not worse. There was no

reappearance of the hernia, but on examination all muscle tone in the rectum had obviously been lost ; it was completely flaccid and a small portion of faecal matter could be extruded only after long agonies of straining. It was quite understood that the loss of muscle tone in the rectum was due to the long-standing nature of the hernia, and that full recovery might be expected after an interval. But the owner was depressed at the result of the operation, and to avoid euthanasia it was decided to perform proctopexy.

The second operation followed five days after the herniotomy, anaesthesia being induced with intraval sodium (M & B), and reinforced with oxygen-ether. Laporotomy was performed far back in the mid-line, and a convenient loop of large colon was drawn forward and sutured to the abdominal wall, using three interrupted catgut No. oo sutures through the muscle coat.

Recovery was uneventful, and a normal passage of faeces took place within 24 hours. At four months later there has been no recurrence of the trouble.

ABSTRACTS

[The Survival of Foot-and-Mouth Disease Virus in Meat and Offal. Henderson, W. M., & Brooksby, J. B. (1948.) *J. Hyg.* **46.** 394.]

Foot-and-mouth virus is destroyed in muscle tissue due to the acidity developed during *rigor mortis*. Six experiments have been done to study the survival of virus in other tissues using six donor cattle for the provision of meat and offal and 86 test-cattle for determination of the virus content of these tissues. In addition, one experiment has been done in which infective material was fed to swine. This involved the use of a further three cattle and 30 swine. The virus content depends on whether the tissue concerned is an affected site of predilection for multiplication of the virus—for example, the tongue, feet, non-papillated pillars of the rumen, etc.—or whether the virus is simply that which may be present in the blood or tissue fluid contained in the material at the time of slaughter. Thus, when liver or kidney is stored frozen, as in the imported-meat trade, it may be shown to have a high degree of infectivity at four or more months and the virus remains active for at least 24 hours after thawing. Liver, kidney, rumen, lymph node and blood from diseased cattle have all been shown to be highly infective and to remain so if stored frozen. Acid formation in these tissues and in blood is not on the same scale as in muscle, and prolonged survival of virus is more likely even with delay in freezing and after thawing. This remains true of lymph node and of residual blood in vessels of a carcase in which the development of *rigor mortis* is complete. Feeding of infective offal to swine under experimental conditions resulted in the appearance of the disease.

J. F.

* * * * *

[Experimental Investigation of Calfhood Vaccination with *Brucella abortus* Strain 19. Campbell, A. D., & Rodwell, A. W. (1949.) *Aust. vet. J.* March. pp. 46-52.]

The author describes the results of an experiment which was designed to test the resistance against natural infection of pregnant heifers which had been vaccinated as calves between four to eight months of age with Strain 19. Sources of natural *Br. abortus* infection during pregnancy were provided by introducing at successive monthly intervals into the same field as the experimental animals a pair of heifers which were caused to abort by artificial infection.

The results of the experiment showed that of 27 vaccinated heifers only one (3·7 per cent.) was infected and aborted whereas of 29 unvaccinated control heifers 18 (62 per cent.) became infected and ten (34 per cent.) of these aborted. The authors point out that the abortion rate in the controls would have been higher had not conception in at least five heifers been delayed with the result that they contracted natural infection before pregnancy.

S. J. E.

* * * * *

[The Treatment of Skin Diseases of Dogs and Cats with Polysulphide in Propylene Glycol. Siegel, M. (1949.) *J. Amer. vet. med. Ass.* **114.** 76-79.]

The author describes the treatment of sarcoptic mange, ringworm, and non-parasitic conditions such as dermatitis and eczema (moist and dry) in dogs and cats with polysulphide in propylene glycol (" Led-O-San "). Four case-reports with photographs are given (three sarcoptic mange, one non-specific dermatitis in the dog), and the treatment of ringworm in six dogs and of sarcoptic mange in two cats is described. A lotion was used consisting of polysulphide-propylene glycol solution, a wetting agent and an antiseptic. The lotion is stated to promote exfoliation of dead epithelium, destroy parasitic mites, penetrate deeply, dry the skin, permit air to reach the skin, and to possess fungicidal and bactericidal properties. No skin or ocular irritation, or toxic symptoms were observed in dogs and cats even when the entire body was treated with the preparation, and no gastro-intestinal irritation followed its administration by mouth. The lotion was non-irritating to the unprotected hands of the user and was easily removed with water.

Fifty-two dogs of all ages were treated for various skin diseases: eleven cases of sarcoptic mange, six ringworm, and 35 chronic dermatitis or eczema. The subjects were clipped either entirely or in the areas involved, freed of fleas, bathed and dried. The lotion was applied daily, usually for seven days, and thereafter, if necessary, every second or third day. All but two cases had been of six months' duration or longer—some one and a half to three and a half years—and most had failed to respond to other treatments. Rapid exfoliation of dead epithelium followed the application of the lotion, and irritation ceased: the " weeping " in moist eczema ceased after one or two applications. Thin, normal skin remained after the shedding of dead epithelium and regrowth of hair took place, in many cases, in ten to 20 days. In the case of ringworm (six dogs) it was not necessary to remove the scabs prior to treatment. Lesions were healed by the end of the treatment period (seven days, daily application) and hair regrowth was completed one to two weeks later. The lotion was particularly efficacious in the treatment of sarcoptic mange in cats. Furniture, rugs and clothing were not stained by the preparation, provided any excess was removed from the hair of the animal after treatment.

C. A. E. B.

REPORT

THE PROVISION OF SAFE MILK OF HIGH QUALITY

Report of the Joint Committee of the British Medical Association and National Veterinary Medical Association

Preliminary

1. The Joint Committee set up in October, 1948 "to consider and report and formulate representations for transmission to government departments, on the problem of providing safe milk of high quality for the community and the supervision of production and distribution of other foods of animal origin," decided at its first meeting that the most important problem to be discussed was that of milk. The Committee hopes to submit a further report at a later date dealing with the supervision of production and distribution of meat and other foods of animal origin, but in view of the introduction of new legislation, the Committee now submits its report on the present position with regard to the provision of safe milk, including reference to the new legislation now in force. The Committee has, during all its discussions, had three main principles in mind—

(*a*) Milk can and must form an important part of the dietary of the nation.

(*b*) Milk is a valuable article of food both for children and adults. Its use for animals must not be overlooked though it is appreciated that at the present time, owing to shortage, a limited amount only can be made available for this purpose.

(c) Every effort must be made to produce milk of the highest quality. It is intended to deal with this problem from the nutritional, chemical and bacteriological aspects in the Committee's final report.

Milk Production

2. Milk production methods may adversely affect the health of the consuming public through either of the following ways:—

(*a*) The milk consumed may carry pathogenic organisms either of bovine or human origin.

(*b*) The quantity of milk produced may be very materially reduced because of ill-health in the dairy herds and/or bad management on the farm.

3. Both the dairy farmer and the veterinary surgeon are vitally interested in these factors. In an attempt to minimise their effects the Ministry of Agriculture provides certain services, advisory and executive. These services are described briefly later in this document. In addition the farmer has the advantage of the advice and professional skill provided by his practising veterinary surgeon. Indeed the majority of those farmers who have reached a high standard of milk production from healthy herds have benefited considerably from veterinary advice given on both disease control within and general management of the herd including direction on breeding, rearing, feeding and housing problems. In this work the veterinarian participates usually as veterinary practitioner, but for certain branches of the work he is acting as a part-time inspector of the Animal Health Division of the Ministry of Agriculture. This part-time arrangement facilitates the co-ordination of public with private veterinary work and also secures a more rapid flow of information beneficial to the control of notifiable diseases. The part-time veterinary inspectorate plays an important part with the whole-time veterinary inspectors in the attested herd and other schemes designed to free dairy herds from tuberculosis and other diseases communicable to man. The work of the Sanitary Inspectors has been complementary to these efforts and there have been conspicuous examples of valuable assistance rendered by them in this connection.

4. Disease control on the farm must be related to general farm economy. Any scheme of disease control or eradication organised on a national basis must be sufficiently elastic to be able to embrace the diverse farming conditions met with throughout the country.

5. Disease control measures for dairy cattle cannot be adopted if liable seriously to reduce the output of milk for human food. Consequently a policy of eradication for tuberculosis based on slaughter of animals reacting to the tuberculin test is not immediately practicable and measures have to be adopted to ensure that unsafe milk produced shall be rendered safe for human consumption. Nevertheless the supply of increased human foodstuffs of animal origin is seriously affected by the prevalence of disease amongst cattle. Comprehensive disease control measures capable of practical application can, and will, have a marked effect in increasing production.

6. The maintenance of livestock in adequate numbers on the farm is an integral part of agricultural economy in that it enables the economic conversion of grass into human foodstuffs as well as being essential to maintain soil fertility and thereby increase crop production. A sudden large diminution in stock therefore is inadvisable as a practical policy, but there are other ways of improving animal health and increasing the production of milk.

7. Contrary to common belief, recent history shows that farmers are receptive to advice on advances made in the veterinary and agricultural sciences if they are sympathetically guided. For the main part, they are willing and anxious to make full use of modern development if their advisers know the difficulties inherent in farming. In the giving of this advice and by its efficient application the veterinary surgeon has played an important part, one which will be equally important in the expansion programme for livestock, which is imminent.

Major Diseases in Dairy Cattle

8. Mortality in young stock can be extremely high and is largely due to diseases associated with faulty management and nutrition.

9. *Infertility*, including that due to infectious diseases, is responsible for enormous under-production of milk and calves, estimated at over one hundred million gallons of milk a year and two hundred and forty thousand calves.

10. *Contagious Bovine Abortion.* Losses of milk and calves attributable to *Brucella abortus* infection were estimated in 1940 to be 40 million gallons and over 300,000 respectively. Widespread vaccination with strain 19 vaccine has had material benefit in the increased production of milk previously lost as a result of this disease. The vaccine is an attenuated one which does not mutate and is not dangerous to man, and when used in non-infected animals provides a measure of considerable public health importance in controlling *Brucella abortus* infection and thereby reducing the danger to human beings. Other less well understood factors inducing abortion are still responsible for huge losses, indicating the paramount need for greater attention to research.

11. *Mastitis* is responsible for losses of milk estimated in 1940 at 48 million gallons. Penicillin and other new anti-biotics at present on field trial provide vastly improved methods of treatment and control, but standards of management and cow-shed hygiene are vital factors affecting the spread of this disease.

12. *Bovine Tuberculosis.* Eradication of this disease from dairy cattle over a period of years is foreshadowed in that the Ministry of Agriculture is expected to introduce shortly an official eradication scheme. The Attested Herds Scheme has built up large numbers of tubercle-free stock on individual farms which will provide the bulk of the replacements for the dairy herds of the future. It is known, however, that a large percentage of stock in the country—probably more than 50 per cent.—have never been subjected to a tuberculin test, and many non-reacting animals could be salvaged from this source. The proportion of reactors varies enormously in individual herds but is likely to be high in the adult stock, particularly in areas of intense milk production.

13. The immediate extension of the Attested Herds Scheme should be complementary to rapid progress in the projected area eradication scheme. A scheme of assisted tests is most desirable and would be welcomed by many farmers. Tuberculosis eradication is a herd-to-herd problem requiring close co-operation between the farmer and the veterinary surgeon. A plan for the eradication of reactors to provide the minimum interference with the economy of the particular farm is essential, together with the adaptation of existing buildings wherever possible, due consideration being given to the avoidance of ideally desirable but unnecessarily extravagant demands. Good and ample water supplies and satisfactory drainage, together with adequate labour, are additional factors of great importance.

14. General slaughter of reactors would not be immediately prac-

ticable in view of the need for the greatest possible output of milk, the maintenance of soil fertility and the fact that a proportion of replacement stock must be bred from reactors. Many reacting animals are of considerable value in the nation's efforts to obtain improved healthy stock, having a high breeding value and a good milking propensity. The question of branding reactors should be further explored and also their segregation, but, in any case, immediate steps should be taken to ensure that all milk from reactors is pasteurised and on no account should reactors be put into herds from which the milk is not heat-treated prior to consumption.

15. These factors together constitute the immediate large-scale problems of the dairy industry but there are many others of less economic importance, and in this connection the problem of Salmonellosis is of particular interest. The need to have an adviser versed in the practical problems of the farm, understanding the physiology of the cow and having a knowledge of the many factors affecting animal health and its relation to human health, emphasises the part the veterinary surgeon must play in the full collaboration with the farmer on the one hand and the public health authorities on the other.

Milk and Dairies Administration as relating to Production

16. The administrative structure for the administration of the Milk and Dairies Act and Orders relating to production is already complex, but it has become even more so under the new legislation. A major change already effected by Parliament is to spread responsibility for making regulations between the Ministers of Health, Agriculture and Food, acting jointly. With interlocking interests, this has the appearance of a sensible arrangement but might also create a defensive system in Parliament which might well prove impenetrable.

17. Within the different Regulations, responsibilities for specified functions are allocated to one or other of the three Ministers. Viewing it broadly, all production problems become the province of the Minister of Agriculture. On the distribution side, the Minister of Food takes over many of the former functions of the Minister of Health. Executive functions in turn devolve from each of the Ministers to various authorities, so that complications in the spread of responsibility are formidable.

18. The effect of the Food and Drugs (Milk and Dairies) Act, 1944, is to transfer responsibility to the Minister of Agriculture from Local Authorities for the administration of the Milk and Dairies Regulations and Milk (Special Designations) (Raw Milk) Regulations so far as they relate to production. A Milk and Dairies Regulation Branch of the Ministry of Agriculture has been set up with delegation of powers to Agriculture Executive Committees on a County basis. These committees, in turn, are advised to delegate to Milk Sub-committees for which appropriate terms of reference are suggested. Membership of these Sub-committees is to include "an adequate number of practical dairy farmers" and it is recommended that professional officers of local authorities, such as Medical Officers of Health, should attend in an advisory capacity. The Milk Sub-committees of the County Agricultural Executive Committees take the place of the present local authority health committees in relation to production administration. Local authorities are, of course, still concerned with some distribution functions. A central Milk and Dairies Advisory Committee is to be appointed by the Minister of Agriculture in consultation with the Ministers of Health and Food, and County Advisory Committees in consultation with County Councils and other bodies. Tribunals, to hear cases concerned with registration, to sit in public, are to be constituted.

19. Agricultural Executive Committees (then War A.E.C.) were created on a county basis to direct agricultural production during the war. They have been continued in substantially the same form. The National Agricultural Advisory Service is a comparatively new division of the Ministry of Agriculture and many of the officers formerly serving the war committees have been taken into it. County Milk Regulations Officers in this service are generally responsible under the Assistant County Agricultural Officers for administration. At the same time, they are to act as secretary to the two committees outside the N.A.A.S.—the Milk Sub-committee of the County Agricultural Executive Committee and the County Milk and Dairies Advisory Committee. County Milk Production Officers (also members of the N.A.A.S.) will be available for the field work, being given executive authority in addition to their present advisory function. A link between the county units and the Ministry's headquarters is provided at the N.A.A.S. provincial level through a Provincial Milk Officer covering several counties.

20. The work of the field staff will consist of routine enforcement of Regulations on the farm and reports on registration and licensing problems. Field work directly relating to disease in cattle will be handled by the Ministry's veterinary staff. The veterinary staff are all in the Animal Health Division of the Ministry of Agriculture and, although they were originally intended to carry out much of the executive work in connection with wholesome and safe milk production, an alteration in these plans has been effected.

21. Centralisation, for the purpose of securing uniformity, is thus seen to be followed immediately by decentralisation in the creation of county executive and advisory committees. Moreover, as officers whose task it will be to satisfy these county committees and the farming community are not required to have a recognised technical qualification, it seems possible that an improvement in uniformity may be attained at the cost of reduced standards of efficiency.

GENERAL REMARKS ON THE PRESENT POSITION

22. The Joint Committee is agreed that the fundamental requirements for providing "safe milk of high quality" can only be met by the promotion of healthy herds, in particular those which are tubercle free, and by efficient pasteurisation.

23. The increased demand for milk both during and since the War has resulted in the rationalisation of marketing. This has brought into being many new officers, authorities and committees.

24. Two new factors have resulted:—

(*a*) the consumer has no longer complete freedom of buying from the milk distributor of his choice;

(*b*) the distributor can no longer exercise a free choice of the farms from which he purchases his milk.

25. It is accepted that the confused administrative position, with full opportunity for overlapping of duties between officials of the numerous authorities, called for urgent revision. This can be appreciated when it is realised that the authorities concerned with milk included (see Appendix A):—

(*a*) Ministry of Health.

(*b*) Ministry of Agriculture and Fisheries.

(*c*) Ministry of Food,

each with its inspectorate, local organisations, and area officers.

(*d*) Milk Marketing Board.

(*e*) County Agricultural Executive Committees.

(*f*) Food and Drugs Authorities (County Councils, County Borough Councils, and certain other of the larger local authorities).

(*g*) County Councils and County Borough Councils (acting as licensing authorities under the Food and Drugs Act).

(*h*) Local Sanitary Authorities (carrying out duties under the Public Health Acts and the regulations thereunder).

26. The Committee is satisfied that changes were called for but what, in its view, is more important are these questions:—

(*a*) Will the new machinery prove more efficient and not unduly wasteful in the use of manpower?

(*b*) Will there be full measure of co-operation between the numerous bodies concerned?

27. It would appear that in the future the list of authorities concerned, with the addition of Tribunals, Central and County Advisory Committees and Joint Committees of producers and distributors will be larger than ever.

28. The different procedure for future administration in Scotland is of interest in that the Local Authorities will have a larger concern in the control of the quality of milk than is envisaged to operate in England and Wales.

29. The staffing problem would seem to be insoluble and the shortage of skilled staff may mean that Peter may be robbed to pay Paul; but if Peter still has important functions to perform the end result may not provide for the improvement desired by all.

NEW LEGISLATION

30. The Committee has studied the various documents dealing with new legislation and its comments are given in Appendix B.

ADMINISTRATION

Ministry of Agriculture and Fisheries

31. The Food and Drugs (Milk and Dairies) Act, 1944, makes

this Minister responsible for production of milk on the farm. The Health Services are vitally concerned with the condition of the milk produced at the farm, for no steps in connection with improved methods of distribution can undo the mistakes of short-comings on the part of the producing farm. The decision as to production is made; no opportunity to avoid duplication of inspections by different parties should be missed.

Ministry of Food

32. The transfer of Functions (Food and Drugs Order) 1948 and the terms of reference to the Scottish Committee make it abundantly clear that the Minister of Food is the Minister concerned with distribution of milk. (See Report of the Committee on Milk Services in Scotland 1949).

Ministry of Health

33. This Ministry would appear to occupy the role of very junior partner in so far as the milk problem exists. One of the chief reasons advanced for the changed procedure is the lack of uniformity in the standard previously existing on dairy farms in England and Wales; the inspectorate staff provided by the Ministry of Health in the past has not been sufficient to render any real assistance to Local Authorities in this connection as has been done in Scotland where there is close liaison and great assistance given by the Department of Health. In the apportioning of blame for this circumstance, the Ministry of Health cannot be without some measure of responsibility. The Committee feels very strongly that the importance of milk both as an essential food and the most dangerous vehicle for the spread of disease, calls for a duty being placed on the State to protect the consumer against adulteration and for ensuring that the article supplied is hygienic and safe.

34. The citizen and the Local Authorities look to the Minister of Health as the head of the department responsible for the maintenance of health and prevention of disease. The Committee recommends that the Ministry of Health in co-ordination with the other Departments concerned, should exercise an active responsibility for the efficient organisation of sampling and testing, as outlined in paragraphs 46-48, to ensure the safety of milk during all stages of production and distribution before reaching the consumer. There should also be a reduction in the number of both central and local authorities which, under the new legislation have varying degrees of responsibility.

35. In this connection it is necessary to draw attention to the *local authorities* concerned with administration:—

(*a*) County and County Borough Councils
(*b*) Food and Drugs Authorities
(*c*) Local Authorities (Sec. 64 Food and Drugs Act, 1938).

36. Consideration has been given to the rather confused position relating to Local Authorities under the Food and Drugs Act, the Milk (Special Designations) Act and the three sets of Regulations.

Food and Drugs Act, 1938, Section 25: Responsibility of County and County Borough Councils prohibiting the sale of Tuberculous, etc., milk.

Milk and Dairies Regulations: Part VII (Sections 18, 19 and 20)—M.O.H. Registration of Milk Distributors and their premises. Responsibility of Local Authorities.

Milk (Special Designations) Act: Licensing and supervision of heat treatment plants. Responsibility of Food and Drugs Authorities.

37. The Committee also gave consideration to the possible advantage of obtaining simplification of administration and greater uniformity by placing the responsibility for administration relating to the Milk and Dairies Regulations, upon Food and Drugs Authorities in place of the Local Authorities.

38. The important duties of Local Authorities through their Medical Officers of Health under Part VII (Sects. 18, 19, 20) should, in the Committee's opinion, remain with Local Authorities for the following reasons:—

(*a*) Notifications of infectious diseases are received in the first instance by these Authorities.

(*b*) Local knowledge as to occupations of contacts of infectious disease is often available; alternatively, the ease of obtaining such information through the local administration should result in no undue delay or difficulty.

Ministry of Agriculture (Area Administration)

39. *Production of Milk.* There must be some Officer, for each area, vested with the responsibility for making decisions (within his sphere of delegated duties) and of reporting to the Agricultural Executive Committee, or whatever other Committee or body is established to deal with these delegated functions. It is noted in "Measures to Improve the Quality of the Nation's Milk Supply" (para. 15, page 4) that "The Veterinary staff of the Department who will in any case be visiting the farm at regular intervals to inspect the animals will then also be responsible for the supervision of the conditions under which milk is produced. Under central control it will be possible to bring about greater uniformity of standard and a continuous improvement in that standard." It is in our view unfortunate that this policy has not been implemented.

40. The Veterinary Officer's responsibility will be confined to matters directly affecting the health of cattle and will not include environmental factors such as housing and the equipment required for milk production. The first requirement for a good milk supply is a healthy dairy herd. It is essential that the Veterinary Officer shall play a full part in this new organisation; the prevention and control of tuberculosis, contagious abortion, Johne's disease and mastitis provide large and useful fields of action, and his expert knowledge must be directly available to whatever Committee may exercise these delegated functions. Contrary to general expectation the routine and special examination of herds has not spectacularly improved the overall situation since the transfer of the veterinary service from the Local Authorities to the Ministry of Agriculture and Fisheries in 1937; indeed there is reason to believe that it has deteriorated in certain areas. An opportunity will be lost and progress will be retarded unless full recognition is given to the importance of environmental factors in so far as they may influence health and disease of herds. The point may be illustrated by an often quoted statement that clean milk can be successfully produced in dark and badly ventilated sheds; this is a perfectly true statement provided additional labour is available and care exercised, but what of the policy? Is it sound? Is is likely to foster healthy herds? Comparable experience in human problems would indicate that no progressive Local Authority would consider the occupation of an unhealthy slum dwelling as satisfactory until such time as the occupants are unable through ill health to carry out their ordinary occupation; the training and experience of the veterinary officer should in comparable problems prove invaluable to the responsible administrative authority and Sanitary Inspectors also have an important part to play in this connection. The Committee cannot emphasise too strongly the advantages which would accrue if it could be ensured that by common practice the veterinary officers and staffs of the Public Health Departments were included in any new administrative plan and their special knowledge and experience used for the general good.

41. In its observations on the Milk and Dairies Regulations the Committee has made a recommendation as to any new water supplies for milk rooms. The Committee would again stress the great importance of the quality and quantity of the water available on dairy farms, processing plants and other sections of the dairy industry as a vital factor relating to the spread of infectious disease. Although it is not advisable to limit the jurisdiction of the Licensing Authority, the Committee suggests that co-operation of officers of Local Authorities and County Councils is essential.

42. *Producer Retailer.* The extension of the powers of the Ministry of Agriculture and Fisheries includes under the heading of production a complete responsibility for the producer retailer; this power relates not only to designated milks but in addition, to any producer retailer of raw milk who may continue his trade until such time, which may be several years, when the area is specified by the Ministry of Food. The medical members of the Committee have stressed the significance of the unequal distribution of bovine tuberculosis in that deaths and crippling disease are more frequent in the village and small town than in the large urban area; the obvious explanation is that the extent of availability of heat treated milk in the large towns is at present better than in the countryside. The Minister of Food has stated that the Orders defining specified areas will be introduced by stages; ten years has been suggested as a possible period of introduction. Will it not be in these small towns and villages, where the risk

is known to be greatest, that the orders of the Minister of Food will prove most difficult to introduce? It should also be remembered that Local Authorities will have lost their existing powers over the producer retailer and no depot testing can operate.

43. The Committee has already suggested that the period of grace during which the accredited producer retailer may continue to function shall be drastically reduced, and further, that no fresh applications shall be considered. The reason for these recommendations is obvious; the designation can no longer be recognised as a safe milk, and the public should not continue to be misled. The Milk (Special Designations) (Raw Milk) Regulations Part II (Accredited) A.3, reads:—

"The herd shall not at any time contain any animal which to the knowledge of the licensed producer had, *before its introduction into the herd,* been tested with tuberculin and had reacted to the test." It is no offence for an accredited producer to have his cattle tested by his private veterinary practitioner. If the results are favourable an application for a T.T. Licence follows; if the results are bad, with a high percentage of reactors, no application for a T.T. Licence is made, but the herd can continue to operate as an Accredited herd.

44. The Committee is seriously concerned as to the provision of a safe milk supply for the small towns and villages; on the information before them the safeguards do not appear, even as short term policy, adequate to meet the present position.

45. The Committee therefore recommends that:—

(*a*) The authority responsible for the health of the community be authorised and required to take regularly at the farm samples for biological tests.

(*b*) A priority be exercised to provide, at stated intervals, routine veterinary inspection for the producer-retailer class of herds.

SAMPLING AND TESTING OF MILK

46. Sampling and testing of milk are undertaken sporadically at different points from the cow to the consumer and for different purposes which may be classified as:—

(*a*) Chemical quality or food value.

(*b*) Cleanliness, keeping-quality and the efficiency of processing.

(*c*) Tests for the presence of infectious organism, including tuberculosis.

47. Some authorities are very active in this matter, others not so. A National Milk Testing Service was created during the War to conduct tests principally directed towards keeping-quality and the large dairies tests were introduced as a trade check. It is understood that at some future date the price paid to the producer may be regulated by the results of keeping-quality tests.

48. Sampling and testing are skilled jobs and their efficient organisation may have a profound effect upon public health. The Committee takes the view that the whole of this work should be unified and suggests that it should be allocated to local authorities at County and County Borough levels, operating through their medical Officers of Health actively co-ordinated by the Minister of Health. Such a system would give Medical Officers and their representatives access at all stages of production and distribution to observe and check factors affecting human health. Sampling direct from cows, commonly done by Veterinary Surgeons on official duties or in private practice, would of course be excluded and regular sampling for purely trade purposes cannot be regarded as within the Medical Officer's province.

MILK DISTRIBUTION

49. The adoption of the following recommendations would, in the Committee's opinion, assist in raising the standard of milk reaching the consumer:—

(*a*) The freedom of distributors to choose their own producers should be restored as far as possible.

(*b*) The complete freedom of consumers to choose their own retailers should be restored.

(*c*) In arrangements for the transport of milk from the farm to the dairy, the prime consideration should be the necessity for milk to reach the dairy early in the day even if this involves the use of more vehicles carrying less churns per vehicle.

(*d*) The rejection of milk graded "C" by the platform rejection test should be compulsory and not, as at present, left to the discretion of the buyer.

(*e*) Milk testing must be co-ordinated and controlled. Implicit in this recommendation are

(i) The introduction of a uniform system of testing acceptable to the Ministries concerned and the Trade. Any test must include reference to the age of any given sample.

(ii) The responsibility of the Ministry of Health shall include the supervision of the health of all dairy personnel and the freedom of milk from pathogenic organisms.

To give effect to those principles local authorities and county councils should be authorised to arrange for samples to be taken for biological testing and where necessary to visit the farm for this purpose, and, in addition, where any sample is found to contain pathogenic organisms an immediate report should be conveyed to the local authority concerned.

(*f*) The Central Departments should be urged to make available as far as may be practicable the labour, materials and equipment necessary for the enlargement and improvement of depots to meet the increased production of liquid milk and the necessary plant for pasteurising and cooling milk.

50. The Committee urges that the Ministry of Health should arrange for early and later periodic courses of instruction for officers in connection with new heat treatment plants.

51. The opportunity should also be taken of stressing the citizen's duty to see that milk bottles are returned to the retailers without delay in a clean and undamaged condition.

CONCLUSIONS

52. Having studied the relevant legislation and proposals for its implementation the Committee is of the opinion that the tendency disclosed therein to classify milk as an agricultural product to the neglect of its significance as a food in relation to health, is not in the best interests of the community.

53. The Committee is agreed that it is desirable to secure greater uniformity in the exercise of control generally but is apprehensive that the proposed changes may result in a diminution of efficiency at all levels.

54. The Committee does not consider that the Health Committee and medical and sanitary officers of the local authorities can adequately be replaced by a new set of persons having an agricultural bias and without the training and experience which alone can give a reasonably sound outlook on the importance of the health aspect.

55. The Committee is impressed by the need to ensure that the Health Department of local authorities, best arranged at a County and County Borough level, should have power to supervise all processing of milk and to take samples at all stages of production, storage and distribution. Samples and testing for all purposes, other than samples taken direct from the cow, might well be a statutory function of these authorities. The exercise of this power shou'd be co-ordinated by the Minister of Health.

SUMMARY OF MAIN RECOMMENDATIONS

(1) The "Attested Herds Scheme" designed to improve the health of cattle and to provide milk that will be free from tubercle bacilli should be extended as rapidly as possible. (Paras. 12 and 13.) Arrangements should be made for the tuberculin test to be more widely applied as a survey measure to accelerate progress in this direction.

(2) Although general slaughter of reactors is not a practical proposition at present, plans for their ultimate eradication should be considered. (Para. 14.)

(3) The question of branding reactors and of their segregation should be further explored. (Para. 14.)

Immediate steps should be taken to ensure that all milk from reactors is heat treated prior to consumption. (Para. 14.)

(4) All milk should be from tubercle free cows and should be pasteurised. In the meantime, the number of designated milks should be reduced to two

(*a*) Tuberculin Tested.

(*b*) Pasteurised

(Appendix B., Para. 4).

(5) Sterilised milk should only be recognised as a temporary measure. (Appendix B., Paras. 5 and 6.)

(6) The designation "Accredited" should be abandoned forthwith. (Appendix B., Para. 2.)

(7) The supervision of all pasteurisation plant should be the duty of the appropriate Food and Drugs Authority. (Appendix B, Para. 3.)

(8) The Minister of Health should exercise a co-ordinating responsibility for the safety of milk at all stages of production and distribution, with particular reference to sampling. (Paras. 34 and 46-48.)

(9) The provision of an adequate water supply with reference to both quality and quantity for all sections of the dairy industry is essential and there should be the fullest co-operation between all concerned. (Para. 41 and Appendix B, Para. 10.)

(10) The provision of safe milk for small towns and villages must be ensured. (Paras. 44 and 45.)

(11) Freedom of choice should be restored to distributors and consumers as soon as possible. (Para. 49 (*a*) and (*b*).)

(12) Speed in the delivery of milk should receive early consideration. (Para. 49 (*c*).)

(13) Rejection of Grade C milk should be compulsory. (Para. 49 (*d*).)

(14) Milk testing must be co-ordinated and controlled. (Para. 46—48 and 49 (*e*).)

(15) Every effort should be made to increase milk production and ensure the availability of plant for pasteurising and cooling milk. (Para. 49 (*f*).)

Appendix "B"

COMMENTS OF THE COMMITTEE ON THE NEW LEGISLATION

Milk (Special Designations) Act, 1949

1. In this Act "The Minister" (which means the Minister of Food) acquires power to limit the sale of milk by retail (in specified areas) to the classes of milk sold under special designations. The Committee is in full agreement with the general intentions of the Act, and trusts that the Minister will lose no time in promoting orders, applying the limitations of retail sale to specified areas, with the resultant stimulus to the use of "safe milk" and the promotion of healthy milking herds.

2. The Committee has received information regarding the amendments suggested by the Public Health Committee of the British Medical Association as set out in Appendix "C" to this report. The Committee wishes, however, to comment particularly on Clause 4 (1) "after the expiration of five years". While fully supporting the suggestion that five years should be reduced to three years the Committee goes further and recommends that the period should be even more drastically reduced and, indeed, the Committee presses for the abandonment of the designation "Accredited". There would appear to be no reason why this problem should be enlarged by making it possible for further accredited producers to be added to the register during the two years following the introduction of the Act. The Committee is of the opinion that Part II Clause 8 (7) and Clause 8 (8) of the Milk (Special Designation) (Raw Milk) Regulations, 1949, should be deleted and that Part III Clause 10 of these Regulations should make it clear that no new applications for the production of accredited milk will be entertained.

3. In addition, the Committee is of the opinion that Clause 8 (4) and the Schedule should clearly provide that the highly technical supervision of all pasteurisation plant shall be the duty of the appropriate Food and Drugs Authority.

Milk (Special Designations) (Pasteurised and Sterilised Milks) Regulations

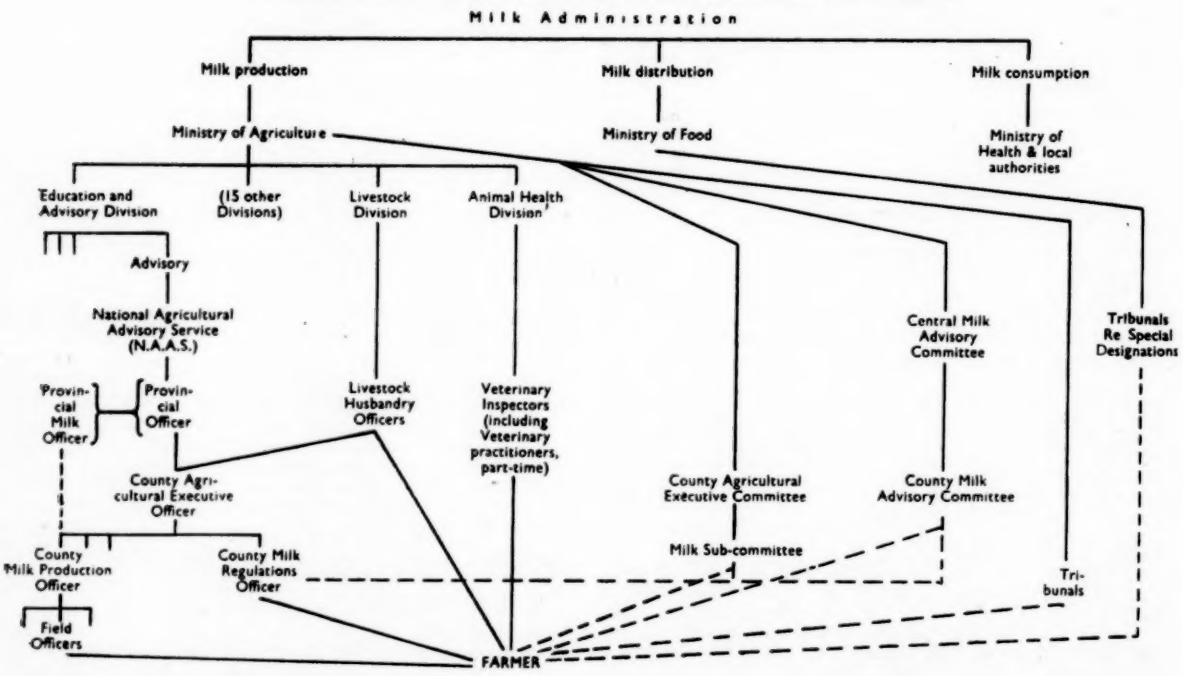
4. It is the unanimous view of the Committee that the time has come for a reduction in the number of designations. The Committee recommends that there should be two designations only (i) Tuberculin Tested and (ii) Pasteurised until such time as all milk is both Tuberculin Tested and Pasteurised. All other milks, including sterilised milk, should be undesignated and ultimately eliminated.

5. The recognition of a new grade, "Sterilised Milk", is not satisfactory. The introduction may meet the convenience of the trade and, no doubt, certain individual purchasers, but an appre-

APPENDIX "A"

CHART

Showing the proposed administrative machinery affecting Milk Production



ciation of the value of milk as the main food of many infants would justify the addendum "unsuitable for babies" to the designation "Sterilised Milk". The Committee would be prepared as a temporary measure only, to recognise such a designation, but feels that there should be adequate control in order to avoid abuse in the use of such milk.

6. There does not appear to be any provision prohibiting the practice of re-heating of milk. The provision in paragraph 7 (2) (Part I Second Schedule) will assist in this connection but the use is limited by the delay of the operation of this provision. The practice, which is at present known to occur, should be stopped or at any rate rigidly controlled as soon as possible.

Milk (Special Designations) (Raw Milk) Regulations

7. These Regulations provide that the Ministry of Agriculture and Fisheries shall issue all production licences including those for the producer-retailer class. The Local Authorities will issue dealers' and supplementary licences. The control of the milk from the producer retailer of "Tuberculin Tested" or "Accredited Milk" will rest solely with the Minister of Agriculture and Fisheries. No formal sample can be recognised unless taken by a person duly authorised in that behalf by the Minister of Agriculture and Fisheries. This position is so different from the previous procedure (see Food and Drugs Act 1944) that it seems worthy of mention.

Milk and Dairies Regulations, 1949

8. The Minister of Agriculture and Fisheries replaces the Local Authority as the Authority responsible for registering dairy farmers and dairy farms. In brief, the production side of milk (including the producer-retailer) is solely under the jurisdiction of this Minister. Local Authorities, however, remain responsible for registration of milk distributors and their premises (other than producer-retailers) and under Part VII, Medical Officers of these Authorities have powers dealing with the risk of the spread of infectious diseases through milk.

9. County Councils and County Borough Councils retain their functions under Section 25 of the Food and Drugs Act 1938 relating to tuberculous milk and the milk of cows suffering from other specified diseases.

10. The Committee desires to make some constructive observations as follows:—

(*a*) *Definition.* Milk is defined as "cows milk"; the increasing use of goats milk indicates that some measure of control of this type of milk is necessary.

(*b*) *Part V.* 11(3)

The Committee recommends the substitution of the word "and" for "or" in the 3rd line—to read "windows and such other means".

(*c*) *Part VI.* 15(*b*) *and* 15(*c*)

During the summer months fly nuisance can and does arise from collections of manure in close proximity to cowsheds or dairies. A feeding yard, surrounded by farm buildings, could not ordinarily be termed the approach or access to the milking shed, if uncleared of manure in the summer months. The practice is objectionable and this difficulty might be met by a requirement "that all manure should be removed to a suitable site well removed from both milking sheds and dairy premises". In addition it would seem desirable that the following points should receive consideration:—

Plans relating to (i) any new building proposed to be erected and (ii) any adaptation of a building, not previously used as part of registered premises, which are intended to be used as dairy premises when completed, should be submitted to the Licensing Authority for their observations before the work is commenced.

There should be effective liaison between the Licensing and Local Authorities to ensure that milk houses and rooms are maintained in a proper state of repair.

Any new supply of water (if not obtained from a public supply) proposed to be provided for a milk room should receive the approval of the Licensing Authority. The Local Authority or County Council should investigate and report upon the proposed water supply.

Appendix "C"

MILK (SPECIAL DESIGNATIONS) BILL

Amendments suggested by representatives of the British Medical Association to the Parliamentary Medical Group, February 2nd, 1949

Note: 1. Suggested additions are *italicised.*

2. The line numbers refer to the Milk (Special Designations) Bill [H.L.] amended on Report (No. 38).

Clause 1 (1)

"In this Act the expression "special designation" *means Tuberculin Tested (T.T.) Accredited, Pasteurised or any other designation which the Minister may prescribe,*

(*a*) in its application otherwise than to Scotland, by Regulations made under subsection (1) of Section twenty-one of the Food and Drugs Act, 1938,

(*b*) in its application to Scotland, by Order made under subsection (1) of section three of the Milk and Dairies (Amendment) Act, 1922, as enacted in section ten of the Milk Act, 1934."

Line 14—omit "a designation".
Line 15—omit "prescribed".
Line 17—omit "a designation prescribed".

This proposed amendment will make clear the classes of milk covered by the phrase "special designations".

Clause 3 (1)

3.—(1) Notwithstanding anything in subsection (1) or (2) of section one of this Act, or in subsection (3) of section two thereof, selling milk as therein mentioned without the use of a special designation shall be permissible if done with the consent of the Minister, *or the local authority,* and he *or they* may give consent for the purposes of this section, either generally as respects selling milk as mentioned in those subsections or restricted to a particular retailer or establishment or otherwise and either unconditionally or subject to conditions, as may appear to be requisite in order to meet any circumstances in which, by reason of a failure of plant or otherwise, use of a special designation which would be obligatory by virtue of those subsections apart from the consent appears to be for the time being not reasonably practicable.

Lines 37 and 40—omit "to him".

Reference to the Minister for permission to sell milk without the use of a special designation would occasion delay and the supplier might be put in the position of breaking the law until the Minister's sanction had been obtained.

The consent of the local health authority could become operative immediately but be made subject to the overriding power of the Minister by means of an additional paragraph as follows:—

Provided that the consent given by a local authority for the purposes of this section shall be reported immediately by the local authority to the Minister and be liable to be revoked by the Minister if such action appears to him to be necessary.

Clause 4 (1)

Line 46—"After the expiration of *three* years . . ." (delete "five").

The proposed period of five years appears to be unnecessarily long.

Clause 5 (1)

No specific provision is made for a local authority to request the Minister to make an order. It was felt that it might be advisable to provide for this initiative by the local authority.

Clause 5 (2)

Line 24—"shall consult with *the local authorities of the area and* such representative organisations. . . ."

It is not only the dairy interests but also the local authorities which are intimately concerned with this section. The local authorities will be called upon to enforce this measure (see Clause 1 (6).

Clause 6

Crown property is normally exempt from inspection by the local authority but unless such powers of inspection are granted, the anomalous position would be created under the Bill whereby a local authority, although required to take samples of milk, would be unable to follow them up in the case of milk coming from plant operated by the Minister. It is suggested that an additional subsection be included on the following lines:—

(*5*) *It shall be within the powers of a local authority to inspect plant maintained within its area by the Minister for the purpose of providing facilities under this section.*

Definition of term "pasteurised milk"

It would be advantageous to include in the Bill a specific reference to pasteurisation by defining the minimum and *maximum* temperatures and duration of the heating in the holder and high temperature short-time methods. This would make it clear that other forms of heat-treatment are not recognised.

The definition of "pasteurised milk" might conveniently be included in Section 14.

November, 1949.

Quarterly Meeting of Council, N.V.M.A.

Summary of Proceedings

The long though far from inactive period since the strenuous activities of the Association's Congress terminated with a busy week for Council, committees and staff, culminating in the quarterly meeting of Council held on Thursday, November 17th, 1949, followed by a special meeting on the following day. Both were held at the Connaught Rooms, Great Queen Street, Kingsway, W.C.1, and occupied the President (Mr. J. W. Bruford, M.R.C.V.S., of Sevenoaks) and a representative attendance of members for the whole of each day.

The quarterly meeting opened with two pleasing features. The first was the reading of messages from various overseas delegates returning thanks for their reception at Congress and expressing their great appreciation of the interest and quality of the proceedings. The announcement of the attainment of a further membership record (3,407) followed, but here gratification was somewhat qualified by the intimation of an exceptionally long list of members whose names automatically would be removed from the register unless payment of subscription is made by the end of the year. The President besought those present to assist in eliminating this serious source of weakness to the Association by approach to members personally known to them.

Consideration of the great volume of committee business—as represented in the reports from those bodies—occupied Council virtually for the remainder of the session. As an indication of the growing influence of the Association, significance attaches to the number of bodies of enquiry—official and otherwise—to which it has been invited, and is preparing, to submit evidence or to furnish representatives. These fields of investigation include the export and slaughter of horses, cruelty to wild animals, the transport of livestock, meat inspection, the organisation of domestic food producers and the nomenclature of insecticide chemicals. In relation to yet another enquiry, which recalls considerable correspondence in these columns, Council agreed that the Association should express its view that in the best interests of humanity all animals slaughtered for human consumption should be stunned prior to having their throats cut. This item arose on the report of the Parliamentary and Public Relations Committee, which also intimated the passage of the Docking and Nicking of Horses Bill, prohibiting these practices except in cases of injury or disease, and the lack of progress of the Pet Animals Bill. This report also paid tribute to the wide and substantial Press publicity secured for the combined London Congresses, largely through the efforts of the Association's Liaison Secretary.

It was agreed that certain important items of business transacted by the Organising and other committees should be referred to the special meeting. Through the good offices of a subcommittee increased fees (to be notified in the *Record* shortly) are to be paid veterinary surgeons for attendance upon accident cases in the Metropolitan area, and enquiry is to be made as to the possibility of extending these arrangements to other parts of the country. A decision that will commend itself to a humanitarian profession is one, emanating from two committees, recommending that veterinary surgeons should treat free of charge the dogs of the blind.

Council were glad to learn from the Home Appointments Committee that discussions on the salaries of the veterinary staff of the Ministry of Agriculture are continuing in a friendly manner between the Association of State Veterinary Officers and the official side of the Ministry. Other questions of salary, *e.g.*, for veterinary officers appointed by artificial insemination centres, are under consideration by the Committee. The Association of Veterinary Students, who raised the matter of the conditions of employment of young graduates, are to be informed that the general picture of the present position, presented by information supplied by principals and assistants, appears to be not unsatisfactory.

The Veterinary State Medicine Committee reported on arrangements for implementing the Food and Drugs (Milk and Dairies) Act, 1944. The Association, after consulting Divisions, has sent forward nominations for the appointment of one veterinary surgeon on the Milk Sub-committee of each County Agricultural Executive Committee. An assurance has been received that the establishment of the Milk and Dairies Advisory Committees will not preclude the N.V.M.A. from making a direct approach to the Ministry on any matters in which the profession is specially interested; also that, while veterinary representation on these committees should ensure presentation of the profession's views, the Ministry will be quite willing to have separate *ad hoc* discussion with representatives of the Association after the new Milk and Dairies Regulations have been in operation for a year or so. In view of this our representatives are to be asked to keep Head Office fully informed of their experience and suggestions regarding the working of the regulations.

Council had before it, from this committee, a report of the Joint Committee of the British Medical Association and the National Veterinary Medical Association on the present position relating to milk: "The Provision of Safe Milk of High Quality." This report which was approved (subject to an amendment which has since been accepted by the B.M.A.) is reproduced in this issue of *The Veterinary Record*.

The General Purposes and Finance Committee reported consideration with the Ministry of Agriculture of proposals for the extension and revision in other respects of the Calfhood Vaccination Scheme; also that certain suggestions put forward by the Royal College to the Stewards of the Joint Measurement Scheme (for children's ponies, etc.) designed to avoid delay in dealing with objections, were to be adopted. The N.V.M.A. is to be asked to suggest a standard fee and scale of expenses, dependent on mileage, to be paid to members of the profession when employed under this scheme.

The varied business of the Technical Development Committee included the intimation that the forms for the collection of accurate data on the incidence of disease will be available to practitioners shortly (the necessity for their co-operation was stressed) and that certain extensions to the valued list of N.V.M.A. publications is imminent.

Congresses and other meetings figured largely towards the close of the session. The Editorial Committee has under consideration the issue of a pictorial souvenir of the XIVth International and LXVIIth N.V.M.A. Congresses held in London in August, while the report of the Provisional Committee revealed good progress in foundation work for the Association's meeting in Cardiff next September (3rd to 8th). Reports of great interest and appreciation, indicative of the warmth of welcome accorded them, were received from the Association's delegates to the Annual Meetings of the Norwegian and the Swedish Veterinary Associations.

UNIVERSITY OF LONDON EXAMINATION IN VETERINARY SCIENCE

Following is the Pass List of the October, 1949, Examination for the University of London B.Sc. (Veterinary Science): Betts, Alan Osborn; Briault, Michael O'Meara; Goddard, Arthur; Pay, Thomas William Ferran; Ryde, Paul Scrivener; Smith, John Earle; Stockwell, Valerie; Toovey, James Arnold; Whittlestone, John Franklyn, and Whittlestone, Peter.

The following Students have passed in Part II only: Bainbridge, John Graham; Morris, Robert Ernest, and Penhale, William George Allin.

All these candidates are internal students of the Royal Veterinary College.

* * * * *

NEED FOR MORE REGULAR VETERINARY INSPECTION OF LIVESTOCK

In his annual report, Mr. J. H. Wilson, chief sanitary inspector to Ilkley U.D.C., states that over 78 per cent. of the beasts inspected at Ilkley Public Abattoir in 1948 were affected by disease or in an unsound condition. There had been no change in the position during 1949. Mr. Wilson reports: "This great quantity of food lost to human consumption is multiplied many times in slaughterhouses and knacker yards throughout the country and shows clearly the necessity for greater efforts and more regular veterinary inspection of live animals. Far too many cows are found in the abattoir riddled with tuberculosis and other diseases, and far too few are being notified in accordance with the Tuberculosis Order, 1938. The quantity of meat condemned as unfit in the slaughterhouses can only be substantially reduced by concentrating upon the eradication of disease in live animals."

ANIMAL HEALTH TRUST LUNCHEON

Minister of Agriculture's Speech in Support

Many well-known figures in the agricultural and bloodstock-breeding life of this country, together with leaders in the canine and poultry world, supported the President, the Duke of Norfolk, and other officers of the Animal Health Trust at a luncheon held by the Trust at the Park Lane Hotel, Piccadilly, W.1, on Tuesday of last week, when the principal guest was the Minister of Agriculture, the Rt. Hon. Tom Williams, M.P.

Others present included the Presidents of the R.C.V.S. Professor Thomas Dalling) and the N.V.M.A. (Mr. J. W. Bruford), Sir Alfred Butt, Viscount Chelmsford, Sir William H. Cooper, Lord Willoughby de Broke, Sir Humphrey de Trafford, Lord Howard de Walden, Mr. Roland Dudley, Sir Thomas Dugdale, Sir William Gavin, Sir Patrick Gower, Sir Louis Greig, Mr. R. W. Haddon, Sir Patrick Hannon, M.P., Sir Percy Loraine, Sir Jocelyn Lucas, M.P., the Earl of Portsmouth, Lord Raglan, Lord Stamp and Mr. H. Woolley (Deputy President, N.F.U.).

Mr. Tom Williams, in proposing "The Animal Health Trust," said that as Minister of Agriculture he was primarily interested in animal health and welfare in its relation to the problems of food production. Those were the problems which gave rise to the largest proportion of his perplexities and responsibilities; therefore he could not—even if he wished—be uninterested in the Animal Health Trust. There was no doubt at all that the wastage from animal disease must be tremendous. He need not tell any of those present that the Government was fully alive to the great importance of increased production through a higher standard of health of our farm animals, and he thought it was true, also, that over the years—perhaps all too slowly—great efforts had been made in this country to raise that standard, not only by imposing controls and regulations—so much liked, and occasionally disliked, by the people of this country (laughter)—but also by assistance towards veterinary education and the sponsoring of research undertaken by the Agricultural Research Council. He was sure there had been a steady improvement—not nearly so rapid as some would like—but, none the less, there had been improvement.

There was a very wide field which remained to be covered, and no matter how much Government institutions might do, he felt there was still room for others in that work. It was for that reason, therefore, that he welcomed that opportunity to express his profound and ardent support of the work of the Animal Health Trust, as undertaken so far.

In its seven years of existence the Trust had made a great and lasting contribution to the work of animal health through its equine, canine and poultry research stations. Knowing the results already achieved, he was looking forward—despite the General Election—with great interest to the work to be undertaken by the livestock stations at Houghton Grange. This work was in no sense a duplication of the work being done under the auspices of the Government. Rather did he regard it as being supplementary to the work being carried out at the Government experimental stations. He was sure there was a wide set of problems that was not covered by official stations, and in these the Trust was able to play an important part.

The problems relating to the health of our domestic animals were linked with the health of human beings to a large extent, and this work was worthy of the maximum encouragement. In all its aims the Trust had set itself a very great task.

In addition to its educational work and that at its research stations, he gathered that the Trust was now planning, when money was available, to have at least one animal hospital in each county, to work in co-operation with the veterinary surgeons, which would be of enormous value to this country.

Not many of the public—excluding bloodstock owners—had subscribed very much to the Animal Health Trust, and he would like to appeal to all connected with agriculture for their help. Here was an opportunity for them to reduce the burden of income tax a little, since contributions by farmers to the Trust ranked as an expense item. "I appeal," concluded the Minister, "not on grounds of sentiment but because I am convinced that the Trust has an important part to play. I am sure the work of the Animal Health Trust can and will be of immense help to animals—not only to the larger animals and to the production of meat for the public of this country but also to all other animals." (Loud applause.)

The Duke of Norfolk's Appeal

The President, the Duke of Norfolk, in response, thanked the Minister for his presence and for what he had said in support of the work and aims of the Trust—a voluntary and independent organisation. He was grateful, also, to the company for coming there and thus affording them the opportunity of spreading information regarding that work far and wide.

Since the setting up of the Veterinary Educational Trust, as it was then called, seven years ago, he had watched its growth and the extension of its activities. He thought they could claim that the warmth of its welcome at its inception—from the then Minister of Agriculture (Mr. Hudson) and the Press—had been justified. So general had been the appreciation of those who knew of the work of the Trust that it might be imagined that it had been established by large benefactions, but that was not so, nor had it received any financial support from the State. It was supported entirely by private enterprise. At its inception the sole assets of the Trust were keen enthusiasm for its work and a belief in its future, which was even stronger to-day than when it started. Now they had four research stations actively investigating the health and disease problems of horses, dogs, poultry and farm livestock. Of these four stations those dealing with horses, dogs and poultry were the first of their kind in the British Commonwealth and Empire.

Some believed that an independent research organisation was unnecessary to-day. Fortunately that view was not held by most in high authority and certainly not by those holding important State appointments. Nevertheless, it was only right that the point of view of those who thought that all research should be undertaken by the State should be considered, and in their Third Report, just issued, they had indicated why in their opinion and in most authoritative opinions an independent research organisation such as the Trust could do an excellent job both for itself and for all research institutions, whether State-aided or not.

It was really necessary for anyone who took an interest in the Trust's research stations to pay them a personal visit in order to gain an adequate impression of what had been achieved in that aspect of their activities in the short space of three years. But this invaluable work would be seriously hampered unless they received much more support from a much wider circle of farmers. The British farmer was generally quick in his appreciation of things that were going to improve his methods and efficiency. He would say frankly that they were being short-sighted in waiting for major results from the Trust's livestock research stations before they subscribed. The Trust looked also to the industrial and commercial firms ancillary to the farming and breeding industry for representative support on an annual basis.

Losses Arising from Disease

Proceeding, the President made reference to the losses arising from disease amongst animals. In regard to the loss of food, this was estimated at 200,000,000 gallons of milk per annum, 6,000,000 full year's rations of meat per annum (based upon 1s. 2d. per ration), more than 1,500 tons of liver, 40,000 tons of poultry meat, and 500,000,000 eggs. In addition, it was worth noting that 24 per cent. of cow hides were spoilt from warble fly: indeed, over 1,000,000 good leather soles were lost each year. Furthermore, there was the huge wastage of animal feeding-stuffs, resulting from the keeping of unhealthy stock or the premature loss of the healthy. This gave an annual total loss, excluding losses arising from horses, dogs, cats, goats and birds and other poultry, of well over £50,000,000.

As a guide to the losses in these other animals, he might mention that out of 100 mares served, 25 proved barren, two aborted, two died and one foal was stillborn. Only 59 per cent. of foals reached maturity. The annual loss through infertility and foal diseases was estimated to exceed £1,000,000.

Again, as a guide to the losses arising from diseases in dogs and cats, he might mention that of every 100 puppies born, 7 per cent. were born dead, 10 per cent. died before weaning and 25 per cent. died before they were a year old. A similar estimate for the losses of kittens was: 3 per cent. born dead, 5 per cent. died before weaning and 15 per cent. died under one year.

Finally, to complete the picture of losses in young animals, it might be added that it was estimated that there was an under-production of more than 1,000,000 calves a year through disease.

It was surely worth the while of everybody to pay something towards the Trust, which was trying to save that waste.

For the individual they had established a Fellowship and Membership of the Trust which were open to all who subscribed at least ten guineas or one guinea a year respectively. If they could get 1,000 firms to subscribe a minimum of 50 guineas each per annum they would be making progress towards their goal of £200,000 a year, a figure which in itself was far below the sum paid annually in compensation for notifiable diseases—and, furthermore, a figure which he considered to be imperative to maintain the independence of the Trust.

The financial resources of the Trust had been strained to the

uttermost in the wise laying of sound foundations for the future. The Trust had spent a maximum on scientific premises, equipment and staff for its main purpose and a minimum on publicity for its appeal for funds. More buildings, staff and equipment were urgently needed. The Trust had received very considerable help from all sections of the Press and from a number of outside organisations and groups in publicising its appeals, and it was more than grateful for such valuable help.

His Grace concluded: "I want to make it quite clear this afternoon that we have arrived at what I consider to be the cross-roads. We have many friends who in the past have helped us to arrive where we are. But I also know that there are those who, for some reason or other, have not merely not supported us, but have even been against us.

"This Trust is not alone at the cross-roads. The economic position of our country is there too. The country will recover and we, too, by our united efforts also will prosper. But it is no time for those who can help us to hold back for what I believe are petty jealousies. I have given you our record: I have given you our report and our present position. I am confident that we not only can go on but can prove of great value to our country at this moment and in the future. Everything we discover—every scrap of scientific knowledge—has been and always will continue to be made public for the benefit of all. I stress once more that our work is to save animals from suffering; to produce purer food; and to avoid waste and save money for this island.

"I claim that our record proves that this can be done. I challenge those who think the Trust may not be necessary to come forward and substantiate that point of view; and, finally, I ask all to walk with us in the great crusade which will help the welfare of our animals and our people." (Loud applause.)

Sir Louis Greig, Chairman of the National Greyhound Racing Society: "We would like to walk with you and to hand you this piece of paper which will be more helpful than words."

The President thanked Sir Louis for the five figure cheque, adding that it was his earnest hope that so generous an example would be followed by many in some degree.

QUESTIONS IN PARLIAMENT

Agricultural Output

Mr. Thomas Reid (December 1st) asked the Minister of Agriculture if he will indicate from the latest figures of livestock and crop returns how his policy of increasing agricultural output by 50 per cent. above the pre-war output has been progressing since 1945-46.

Mr. T. Williams: Net agricultural output this year is provisionally estimated at 135 per cent. of pre-war compared with 123 per cent. in 1946-47 (which was the year immediately before the expansion programme was launched) and with the objective of 150 per cent. in 1952-53. Last June there were 25¼ million more poultry in the United Kingdom than in 1947; nearly 1,200,000 more pigs, 415,000 more calves; 660,000 more cattle and 2,750,000 more sheep. Farmers are also responding well to the campaign for increased production of dried grass and silage.,

Mr. Reid: Can my right hon. Friend say whether that remarkable result is due entirely to the policy of the present Government, and not to the policy of any other Government?

Mr. Williams: Obviously that must be the case.

Mr. Snadden: Is the increase of 135 per cent. a United Kingdom increase or an England and Wales increase?

Mr. Williams: The figures supplied are for the United Kingdom.

. . . . .

County Executive Committees

Sir W. Smithers (December 1st) asked the Minister of Agriculture what are the qualifications as to prestige and authority in their counties of the 12 voluntary members of county agricultural executive committees.

Mr. T. Williams: Having regard to the provisions of the Agriculture Act, 1947, concerning the constitution and functions of the committees, I endeavour to select persons who are conversant with the various aspects of agriculture in the county or who have administrative experience, and whose knowledge, ability and standing in the county are recognised by the industry.

Sir W. Smithers: In view of the fact that the county committees in England and Wales employ 10,142 people at a cost of £3,434,481 per year, does the right hon. Gentleman really think that this enormous expenditure is justified by any—if any—increased production? Are not the laws of supply and demand, and the bankruptcy courts better tests of efficiency?

Mr. Williams: I think I shall be able to justify the expenditure on labour and machinery in a subsequent reply that I shall give.

Mr. Geoffrey Cooper (December 1st) asked the Minister of Agriculture in view of the fact that the figures recently published in each county of the staffs employed by the county agricultural executive committees show no relation to the size and number of farms in each county, nor the area covered, what steps are taken to keep a check on the size of these staffs.

Brigadier Medlicott asked the Minister of Agriculture what arrangements exist for ensuring that the size of the staff of each county agricultural executive committee bears some relation to the size and number of farms in the county.

Mr. T. Williams: The staff requirements of county agricultural executive committees do not depend solely upon the factors mentioned by the hon. Members: to a considerable extent they are governed by the types of farming, the amount of contract work undertaken for farmers, and the area of land cultivated by the committee. The staffs of committees are under constant review in the light of all these factors.

NOTES AND NEWS

Diary of Events

Dec. 13th.—Scientific Meeting of the Zoological Society of London, Regent's Park, N.W.8, 5 p.m.

Dec. 14th.—Meetings of the Executive (2 p.m.) and Editorial (3 p.m.) Committees, N.V.M.A.

Dec. 16th.—Meeting of the Scottish Regional Group of the Association of Veterinary Teachers and Research Workers, at the Glasgow Veterinary School, 2.30 p.m.

Dec. 16th.—Meeting of the Biochemical Society, in the Department of Biochemistry and Chemistry, Guy's Hospital Medical School, 2 p.m.

Dec. 16th.—Meeting of the Ayrshire Division, N.V.M.A., at Ayr (Hotel Dalblair), 2.30 p.m.

Dec. 21st.—Meeting of the Section of Comparative Medicine, Royal Society of Medicine, 1, Wimpole Street, W.1, 5 p.m.

Dec. 21st.—Meeting of the Association of Veterinary Teachers and Research Workers, at Leahurst, Wirral, 10 30 a.m.

Dec. 30th.—Annual Dance, Dumfries and Galloway Branch V.V.B.F. Ladies' Guild, at Dumfries (Cairndale Hotel).

1950.

Jan. 6th.—Meeting of the Southern Regional Group of the Association of Veterinary Teachers and Research Workers, at the Royal Veterinary College, Camden Town, N.W.1, 2 p.m.

Jan. 13th.—R.V.C. Students' Society Annual Ball, Grosvenor House, Park Lane, W 1.

Jan. 18th.—Meeting of the Southern Counties Division, N.V.M.A., at Southampton (Polygon Hotel), 6 p.m.

Next Meetings of Council and Standing Committees, N.V.M.A.

(*Committees at 36, Gordon Square, W.C.*1)

Wednesday, February 8th

11.0 a.m. Parliamentary and Public Relations Committee.
2.0 p.m. Organising Committee.
4.15 p.m. Home Appointments Committee.

Thursday, February 9th

10.0 a.m. Veterinary State Medicine Committee.
2.0 p.m. General Purposes and Finance Committee.

Friday, February 10th

11.0 a.m. **Council Meeting** at the Connaught Rooms, Great Queen Street.

* * * * *

Collection of Accurate Data on the Incidence of Disease

Some time ago particulars were published in this journal of a scheme for collecting accurate data on the incidence of disease. Members will have noticed that four forms are to be used in this scheme and the Association called for volunteers from among practising and other veterinary

surgeons to co-operate in collecting this information. (See *The Veterinary Record* of October 1st, No. 40, Vol. **61**, page 614.)

A number of veterinary surgeons have offered their help, but insufficient numbers have as yet volunteered. It should perhaps be made clear that offers of help would be welcomed from veterinary surgeons even if there is only one herd-owner who can be persuaded to co-operate. In the earlier notice each veterinary surgeon was asked to bring in ten herd-owners, and this may have been a deterrent in many cases.

This is a further appeal to any members interested, therefore, to send in their names to the General Secretary, N.V.M.A., 36, Gordon Square, London, W.C.1.

The forms are now available for distribution. A full explanation of the scheme and its requirements will be forwarded to all who offer their co-operation in this important field scheme of collection of accurate data of disease incidence.

* * * * *

N.V.M.A. Publications

The following Sections of the Association's Report on the Diseases of Farm Livestock have undergone revision and are available on application to 36, Gordon Square, London, W.C.1, at the prices indicated: Section III—Parasitic Diseases of Cattle (members and students 2s. 6d., non-members 6s. 6d.); Section V—The Husbandry and Diseases of Pigs (members and students 2s. 6d., non-members 10s.).

* * * * *

PERSONAL

Birth.—Clarke.—On November 30th, 1949, to Myra (*née* Bingham, M.R.C.V.S.), wife of Dr. E. G. C. Clarke, a daughter—Jean Rosemary.

. . . . .

Marriage.—Moors—Hamilton.—At the Auld Kirk, Ayr, on St. Andrew's Day, by the Rev. R. Robertson, B.A., B.D., William Millar, M.R.C.V.S., only son of Mr. and Mrs. Wm. Moors, 9, Craigie Avenue, Ayr, and Elizabeth (Betty) McKinlay, younger daughter of Mr. and Mrs. J. J. Hamilton, 37, Mill Street, Ayr.

. . . . . .

Forthcoming Marriages.—Appleby—Newitt.—The engagement is announced between E. Calvert Appleby, B.Sc., M.R.C.V.S., of Enfield, Middlesex, and Miss Josephine M. Newitt, B.Sc., eldest daughter of Mr. and Mrs. A. Newitt, of Bebington, Cheshire.

Richardson—Franks.—The engagement is announced between John Richardson, M.R.C.V.S., only son of Mr. and Mrs. R. G. Richardson, of New Malden, Surrey, and Gweneth Mary, only daughter of Mr. H. C. Franks and the late Mrs. Franks.

. . . . . .

Will.—Mr. Munro Erskine White, M.R.C.V.S., of Cherry Croft, Francis Way, Salisbury, who died on June 16th last, left £12,851 (net personalty, £12,557).

. . . . . .

University of London Degree.—Notification has only now reached us that in December, 1948, Mr. Jack K. Wilde, B.Sc. (Hons.), M.R.C.V.S., A.R.C.S., was awarded the degree of M.Sc. in Veterinary Science as an Internal Student of the University of London for a thesis and examination on the subject of "Some Aspects of Rinderpest."

* * * * *

R.C.V.S. OBITUARY

Canning, David Dunlop, Divisional Inspector, Ministry of Agriculture and Fisheries, of 98, Beech Avenue, Northampton. Graduated Glasgow, July, 1925; D.V.S.M. 1928. Died December 4th, 1949; aged 46 years.

Hogg, Frank, Major R.A.V.C. (retd.), of 61, Brownston Street, Modbury, Ivybridge, Devon. Graduated Edinburgh, May 19th, 1909. Died suddenly, November 24th, 1949; aged 62 years.

Murphy, Robin Thomas Montagu, Balrath House, Balrath, Co. Meath, Eire. Graduated Dublin, December 17th, 1942. Died August 24th, 1949.

Major Frank Hogg, Late R.A.V.C.

It is with regret that the death of Major Frank Hogg, late R.A.V.C., is announced. He had paid a visit to the Modbury foxhounds, accompanied by Mr. W. E. J. Brooks, and on coming out of the kennels suddenly collapsed and died from heart failure.

Major Hogg joined the R.A.V.C. in 1911 and saw service in India and China (acting as D.A.D.V.S.) and the first World War, 1914-18, in France. Later he retired and returned to Hong Kong, but this time as veterinary surgeon to the Hong Kong Jockey Club, engaging in private practice in Addibow. In 1942 Major and Mrs. Hogg were interned in Hong Kong by the Japanese. Mrs. Hogg died in Modbury in July this year, so that Major Hogg has not long survived her passing.

He was a man of sterling character and much charm and even in the short time he had lived in Modbury had been regarded with much esteem and affection by the townspeople. Major Hogg has acted as Secretary to the Modbury Harriers.

There was a large attendance at the Crematorium, Plymouth, on November 29th, when the funeral took place. Messrs. James Brown, W. E. J. Brooks, K. C. Gledhill and N. M. Clayton (nephew) represented the veterinary profession.

The Late Mr. Jack Johnston, M.R.C.V.S.

An Appreciation

It was with a deep sense of the uncertainty of life that the veterinary profession in Yorkshire and the farming community around Driffield learned of the death in a hunting accident of the keen veterinarian Jack Johnston, as recorded in your issue of November 26th.

Born near Brechin, Angus, of farming stock, he took his University Diploma in Agriculture at Aberdeen intending to take up farming as his career, but after several years he entered the "Dick" Veterinary College and passed through with distinction, gaining medals in many subjects. The East Riding was his choice of sphere for practice and after assistantships in Hull and Driffield he took over the practice of the late George Simpson in 1934.

In spite of his large practice he continued to interest himself in farming and a few years ago acquired a dairy farm and built up an excellent herd of over 100 Ayrshires, which by good management and husbandry is one of the best in Yorkshire. Always thoroughly practical, with his competence in both veterinary and agricultural work he was as adept at setting a plough as setting a broken bone and had that happy ability of being able to talk with first-hand experience on any subject connected with agriculture.

His enthusiasm for hunting, which, alas, has resulted in his untimely end, endeared him to the hunting community in the East Riding, for he was a fearless rider.

He will be sadly missed by his many friends and the deep sympathy of all of us goes out to his wife, a daughter of Mr. A. Spreull, M.R.C.V.S., Dundee, and three young children.

P. L. S.

* * * * *

Penicillin in the Control of Swine Erysipelas

The use of penicillin in the control of erysipelas in pigs has naturally received considerable attention and we have had correspondence from several veterinary surgeons stating that they have had success with treatment. This note is included since doubt has been raised by other veterinarians and also research workers suggesting that treatment by this method is ineffectual. The impression seems to be, if we judge rightly, that there is danger of relapse in pigs unless the initial dose is sufficiently high, and here we are in a quandary, seeing that on occasion 20,000 units seems to be effective and on other occasions relapse occurs where 100,000 units has been used. Possibly the latter dose should be regarded as a minimum for store pigs, rising to 250,000 units for fully grown animals, repeated in 24 hours. Woodbine (1946)* recorded experiments on treatment of mice infected with the swine erysipelas bacillus in which mice were not protected, and we feel that these results may have been unsatisfactory because of a low dosage. Certainly there does seem to be considerable benefit in the use of penicillin in the field, and it would be interesting to have practitioners' views to arrive at a more satisfactory opinion on this problem.

* *Vet. J.* **102**, 88.

LEGAL NOTES

Alleged Lead Poisoning of Cattle.—Lord Sorn herd a debate in the Court of Session in two actions in which Renfrewshire farmers claim payment of damages from the Ministry of Supply and Robert A. Thom & Co., Ltd., 54, Gordon Street, Glasgow, arising from the alleged poisoning of cattle by ingestion of red lead paint.

In the first action John Ritchie, Barrangary Farm, Bishopton, Renfrewshire, sued both defenders jointly and severally for £1,000. He is the tenant of ground adjoining the Royal Ordnance Factory, Bishopton, the Ministry being the landlord and owners and occupiers of the factory.

In June, 1948, Messrs. Thom, in pursuance of a contract with the Ministry, started to paint the boundary fence separating the pursuer's ground from the factory without, he maintains, giving him any warning of their intention. They used red lead paint. When he saw what was being done pursuer removed his cattle from the fields, waited until the fence was dry, and then returned the cattle. Six days later, the pursuer alleges, an Ayrshire heifer belonging to him died from lead poisoning. Other cattle later died from the same cause, and others were severely injured. He believes that the painters left a considerable number of splashes of red lead paint on the grass.

The defenders deny liability and plead contributory negligence on the pursuer's part. The Ministry deny responsibility for the actions of Messrs. Thom, and the latter contend that it was the Ministry's duty to protect the cattle either by giving the pursuer warning of the danger or by fencing off the affected part.

In the second action, based on similar pleadings, Thomas Linden, Shalloch Farm, Bishopton, claims payment from both defenders jointly and severally of £250 in respect of the death of a heifer through lead poisoning.—*Farming News.*

* * * * *

CLEANING UP OUR HERDS

"Second thoughts are usually wisest, and it is well, therefore, that the Minister of Agriculture should have given further consideration to the important question of establishing tuberculosis-free areas" states *The Scottish Farmer*, under the above heading in its issue of December 3rd. "In view of the progress already made in this direction, particularly in Scotland and in Wales, both of whose records are in a marked contrast to what has been achieved in England, it would have been a retrograde step to link up deferment of this salutary proposal with the economy campaign. Indeed, on the broad issue, it might be asked whether a saner economic policy could be devised than cleaning up our herds—with the important results that must inevitably derive therefrom in regard to improved public health.

"There was grave fear, following the first ministerial statement, that the scheme was to be put into cold storage for an indefinite period. It is all to the good, therefore, that October 1st, 1950, has been fixed as the date for the start of the scheme, for in truth, taking the country as a whole, there is little cause for congratulation over what has been achieved since 1937 when the Government of the day decided upon a vigorous attack to clean up our infected herds.

"On reviewing the position, we can see that both Scotland and Wales have done reasonably well—some areas of Scotland remarkably well indeed. Zetland, Bute and Ayr are "star" counties. The first two, being island areas, are perhaps favoured by geographical situation—which is not in any way to detract from their achievement; but in Ayrshire the performance is particularly meritorious and an example to other areas, which should at least be thinking about taking more vigorous steps in readiness for the opening of the scheme less than a year hence."

* * * * *

SOUTHERN COUNTIES VETERINARY SOCIETY DINNER

A dinner of this Society was held at the Polygon Hotel, Southampton, on the evening of Saturday, November 12th, concerning which the Hon. Secretary, Mr. Chas. A. Foden, writes: "It was a function suggested by Mr. G. N. Gould for the purposes of bringing the members together in a social rather than a professional atmosphere, and to provide an occasion for them to meet the heads of the agricultural and other interests with whom their work brings them into contact. To this end the following guests of honour were welcomed by the President, Mr. J. B. White, of Salisbury, several of them adding to our pleasure by bringing their ladies with them: the Chief Agricultural Officers of the County Agricultural Executive Committees for Hampshire (Mr. T. Wannop Williamson) and the Isle of Wight (Mr. C. Kingsley), the County Chairman of the National Farmers' Union for Hampshire (Mr. A. G. Machin) and Wiltshire (Mr. R. Trehane). Unfortunately, although Mr. T. R. Ferris, of the Dorset A.E.C., kindly accepted our invitation, he was prevented by illness from being present.

"These ladies and gentlemen were warmly welcomed by some 30 members and their wives at a reception in the foyer of the hotel. The company then moved in to an excellent dinner, after which the informality of the occasion was preserved by keeping the speeches limited in both number and length. 'The Southern Counties Veterinary Society' was proposed by Mr. Machin and responded to by the President on behalf of the Society. Mr. Trehane, Mr. G. N. Gould and Mr. E. G. Morris also spoke.

"The success of the evening was such as to warrant the hope that this will be made an annual opportunity for members to support their Society in a social event, and to make more widely known to our lay friends the virility of the profession in this area."

* * * * *

V.V.B.F. (LADIES' GUILD) IRISH BRANCH

A highly successful bridge tournament, under the auspices of the above, was held on Saturday afternoon, November 19th, in the Monument Café, Grafton Street, Dublin. The use of the café was kindly given to the Guild free of charge by the management. Special thanks are due to Mrs. S. O'Donovan, who was instrumental in achieving this, and for her untiring efforts in endeavouring to make this initial function a success. The Lady President, Mrs. J. J. O'Connor, also worked very hard and brought a large party to the tournament..

There were 22 tables and the total proceeds, including price of admission, donations and raffle amounted to the generous sum of £27 12s. 4d., which the Ladies' Committee consider a very good start to their efforts to supplement the amount from this country towards the Central Fund. Numerous valuable prizes were presented by various firms in Dublin, members of the Committee, friends of members and veterinarians. The raffle prizes were kindly donated by Mrs. M. J. Byrne.

Prizes were gratefully received from Mrs. J. J. O'Connor, Mrs. T. G. Browne, Mrs. A. F. O'Dea, Mrs. R. H. Lambert, Mrs. S. O'Donovan, Mrs. P. E. Mullaney, M.R.C.V.S., Mrs. M. J. Byrne, Mrs. K. Lowndes, M.R.C.V.S., Mrs. F. J. Daly, Mrs. J. Flynn, Mrs. T. F. Connolly, Mrs. Martin Murphy, Mrs. de Vere Hunt, Mrs. Courtney and Mrs. J. A. Fallon. The following kindly sent donations towards the bridge tournament:—Mrs. P. A. Rogan, Mrs. George Dunne, Mrs. J. J. Cosgrove, Mrs. J. Lyons, Miss Hilda Bisset, M.R.C.V.S., Mrs. Trevor Scott, Mr. Jim Donnelly, M.R.C.V.S., Mr. P. M. McManus, M.R.C.V.S., Mr. J. M. Murphy, M.R.C.V.S., and Major McKenna.

At the close of the tournament Mrs. J. J. O'Connor (President) presented the prizes to the winners of the card games and the raffle prizes. Mr. J. Desmond O'Connor (Hon. Secretary and Treasurer) thanked all those present for contributing to the success of this enjoyable function for so deserving a cause.

* * * * *

CONFERENCE OF THE UNIVERSITIES OF GREAT BRITAIN AND NORTHERN IRELAND

The 1949 Conference of the Universities of Great Britain and Northern Ireland, which has been convened by the Committee of Vice-Chancellors and Principals, will be held in the Beveridge Hall, University of London Senate House, during December 16th and 17th. The programme consists of three sessions—one on December 16th and two on December 17th—and the subjects and speakers will be, respectively: Sir Walter Moberly's book, "The Crisis in the University," Sir Walter Moberly and Professor L. J. Russell; general education of students, Professor F. T. H. Fletcher; place of technological education in university studies, Sir Lawrence Bragg, Sir Edward Appleton and Professor Andrew Robertson. A printed programme, including the names of the university delegations and of specially invited guests, is in course of preparation. It is also hoped to include in this programme papers in connection with the opening addresses. The printed programme will be distributed a few days before the Conference.

* * * * *

A.V.T. & R. W. "Symposium" Meeting.—In our Notices Column will be found particulars of the meeting to be held by the Association of Veterinary Teachers and Research Workers at "Leahurst," Wirral, on December 21st, which takes the form of a symposium on the subject of bovine infertility, by workers who are actively engaged in this field. This method of collecting together, from several sources, workers in a particular field, is commonly practised by such bodies as the Agricultural Research Council and we believe, was introduced to the veterinary profession by the Central Veterinary Society.

BULL LICENSING IN SCOTLAND

Proposed New Regulations

New regulations for the licensing of dairy and beef bulls in Scotland are likely to result from discussions which have recently been held between the Department of Agriculture, the N.F.U. of Scotland, the Royal Highland and Agricultural Society, the various cattle breed societies, and other interested organisations. It is expected that the regulations—to be made under the Improvement of Live Stock (Licensing of Bulls) Act of 1931—will take effect on June 1st, 1950.

Since all bulls licensed after that date will come under the new regulations, the N.F.U. of Scotland considers that owners of bulls should have knowledge of the progress which has so far been made in the discussions.

The proposal is to introduce regulations which will provide for the issue of licences differentiating between beef and dairy bulls. For both types of bulls, however, there will be two main categories of licences. The designation of these licences has not yet been agreed upon, but for the sake of clarity the N.F.U. refers to them as "A" and "B" licences. An "A" licence will be granted in respect of bulls entered or eligible for entry in the pedigree register of approved breed societies. "B" licence will be granted in respect of bulls which conform to breed standards, but which are not eligible for registration in the herd book of the breed.

Fuller explanation is necessary in the case of dairy bulls owing to the need for taking into account the factor of milk production qualifications. It is proposed here that an "A" licence should be awarded in respect of pedigree bulls whose dams, and dams of sire, have certain production standards. The National Farmers' Union has advocated that these qualifications should be related to the total quantity of butter fat subject to a minimum total milk yield and butter fat percentage approved by each breed society. The standard which the Union has recommended, and which is expected to be adopted, is that the minimum quantity of butter fat should be not less than 225 lb. with the first calf, 262 lb. with the second calf, and 300 lb. with the third and subsequent calves—the lactation period to be 305 days. For example, if a minimum milk yield of 6,000 lb. in the first lactation is multiplied by a minimum butter fat percentage of 3·75, the standard would be 225 lb.

For dairy bulls which do not reach these qualifications or for non-pedigree bulls, or bulls from non-milk recorded herds, it is proposed that there should be a "B" licence. It is probable that provision will be made for bulls awarded this class of licence to qualify in the course of time for an "A" licence.

As regards both beef and dairy bulls, however, a general licence is likely to be available for bulls which do not qualify for a specific beef or dairy licence but which conform to the requirements of the present Bull Licensing Scheme.

Both Milk and Live Stock Committees of the Union have expressed their approval of these proposals, which are designed to tighten up the existing regulations for bull licensing.

* * * * *

LIVESTOCK RESEARCH IN SCOTLAND

"Developments at the Edinburgh School of Rural Economy on Bush Estate continue apace," states a contributor to *Farming News*. "The farm of Easter Bush, of 150 acres, on the estate has now been taken over, and is to be under the direction of the Royal Dick Veterinary College and the Agricultural Research Council, as a cattle breeding research station.

"On Dryden Mains, another of the farms in the Bush and Dryden set-up, 70 acres have been allocated to the A.R.C. for work relating to pig breeding. It is probable that this department will have 1,000 pigs when fully stocked, and the hope is that the buildings here will be completed sometime in March. Both these livestock research stations will be under the control of Professor R. G. White."

* * * * *

THE B.M.A. AND ADVERTISEMENTS OF PROPRIETARIES

"Just over a year ago the British Medical Association set up a committee on the advertising of proprietary medicines," says the *Pharmaceutical Journal* in its issue of December 3rd, and proceeds: "Its precise terms of reference were 'to propose amendments of the British Code of Standards in relation to proprietary medicine advertising and to prepare a reasoned statement on the preparation and sale of proprietary medicines.' The Committee has now made its report, and, after certain modifications, this has been approved by the Council of the B.M.A. A number of bodies and organisations interested in the advertising of medicines was consulted and from the information thus gleaned, together with the accumulated knowledge of the Association and the experience of members of the Committee, certain deductions were drawn. Briefly, these may be summarised as follows:—

1. Self-medication by the public is an ineradicable habit, but the public must be protected against its dangers. Self-medication implies self-diagnosis and many serious disorders in their early stages present the same symptoms as trivial complaints.

2. A real effort is being made to improve the standards of proprietary medicine advertising and this advertising has, in fact, improved.

3. The British Code of Standards (see *P.J.*, April 24th, 1948, p. 291) is a step in the right direction and on the whole the Code is being applied with a fair measure of success.

4. There should be more control of advertisements which mislead patients and prevent the early treatment of disease. The Code of Standards Committee should have reasonable grounds for believing that a product advertised is capable of doing what is claimed for it.

5. Statements that 'all doctors' or 'most doctors' recommend a product should not be permitted. Opinions should be obtained from authorities or persons of the highest scientific standing and integrity.

6. The production of a 'white list' of publicly advertised medicines is not, at present, a practical proposition.

7. More stringent measures should be taken to ensure that newspapers do not accept advertising from firms which disregard the provisions of the Code. The disciplinary powers for the enforcement of the Code are at present insufficient.

8. The solution does not lie in the compilation of a list of disorders for the treatment of which advertising is not permitted.

"It will be seen that no attempt was made by the Committee to tackle the second part of its remit—the production of a statement on the preparation and sale of proprietaries—and it may perhaps be assumed that this task presented difficulties which were insuperable to a committee comprised mainly of medical practitioners.

"To turn for a moment from the report of the Committee to the account in the *British Medical Journal* of the meeting at which it was presented, it is learnt that the Council rejected a proposal that there should be printed on every wrapper, container or label 'If you do not obtain early and lasting relief of your symptoms consult your doctor,' one member suggesting that the statement inferred 'Try this out and if it is not satisfactory see your doctor.' Perhaps Lord Horder's remark was even more to the point. He is reported to have said that when he introduced a Bill into the House of Lords ten years ago 'it was made perfectly plain that this anti-social campaign should either be tackled thoroughly or left alone. This was dangerous meddling and nothing more.'

"Nevertheless, readers of these comments and of the published summary of the report (*P.J.* **109** (4th series). 439-440.) may form the opinion that the time of the Committee was not entirely wasted. Once again the British Medical Association has pronounced its views on the advertising of proprietary medicines, although admittedly its voice has lost a little of the force with which 37 years ago it categorically advocated 'a full scheme of statutory registration and control which would prevent the making of false and exaggerated claims,' a recommendation which the Pharmaceutical Society reiterated and expanded in its memorandum sent to the Ministry of Health in 1947. What the British Medical Association now says in effect is this: It is now the duty of the Code of Standards Committee, comprised of representatives of the manufacturers of publicly advertised medicines, of advertising agents, newspapers and periodicals to take over the control of proprietary medicine advertising and to ensure that all questionable advertising is eliminated. The extent to which the Code Committee is able to do so will be watched carefully by all those who are alarmed, and concerned from humanitarian motives, at the false and misleading claims for medicines which are still appearing in the public Press. And we are sure that nowhere does this form of advertising undergo such careful scrutiny as in the Ministry of Health."

* * * * *

Farm Equipment at the Poultry Show.—Striking advance in farm equipment design is to be demonstrated by Britain's leading appliance manufacturers at the National Poultry Show on December 8th, 9th and 10th. Healthy competition here is one of the surest means to lower production costs, always with an eye to quality and durability, and the importance manufacturers attach to a good showing at the National is to be gleaned from the number of entries received for the appliance competition at Olympia, for which the organisers offer trophies for the best new or improved items of equipment. Out of 150 trade exhibitors at the show 44 of them have entered one or more items for this competition.

INDIAN DAIRY RESEARCH INSTITUTE: SILVER JUBILEE

"The difficulties of efficient dairying increase rapidly with the ambient temperature, and tropical dairying is beset with hazards which are not encountered in a more temperate climate," observes *Nature* in its issue of December 3rd, and continues: "If children in hot countries are to be satisfactorily fed, and if, in countries such as India, the predominantly cereal diet of the great majority of the population is to be balanced by a sufficient intake of animal protein, fat, vitamins and lime, then tropical dairying, despite the difficulties, must be effectively practised. This is particularly important in India where religious sentiment is against the consumption of most types of animal food other than milk and dairy products.

"What development there has been in dairying and dairy science in India during the past 25 years has been, in no small part, the result of the activities of the Indian Dairy Research Institute (formerly the Imperial Dairy Research Institute), which has just published a 'Silver Jubilee Souvenir, 1923-48' (pp. 45; Bangalore, 1948), with an interesting account of its development and progress since its establishment in 1923 at Bangalore. A very large proportion of the technical personnel—still grossly inadequate in numbers—of the Indian dairy industry, both the personnel engaged in improving the milk supply and those dealing with the technical aspects of milk distribution and manufacture, has been trained at this Institute, and most of the dairy research for the whole sub-continent is carried out there. Inadequate though its resources have been, and still are, to meet the enormous needs for development and technical improvement in every direction of Indian dairying, and despite past and present neglect by those in authority, the Institute has kept together a nucleus of well-trained workers and maintained a keen and hopeful spirit. With the solution of some of the most pressing political difficulties of the young Dominion, there can be little doubt that the Government, with the nutritional needs of the Indian people at heart, will support with adequate funds the well-considered scheme, already submitted to it, for the provision of more ample facilities for the future work of this Institute."

* * * * *

The Geneva correspondent of *The Times* reports that to house the World Health Organisation a new wing and new floors are to be added to the Palais des Nations at a cost of 3,684,000 Swiss francs. Towards this the Swiss Government will contribute 3,000,000 francs. The new plans are far less ambitious than the earlier project which had envisaged a skyscraper tower and other vertical structures to which the Swiss authorities had objected. The plans also make a saving of between 1,000,000 and 2,000,000 francs. If they are passed by the General Assembly at its present session, building will be begun next spring.

* * * * *

ADDRESSES OF DISEASE-INFECTED PREMISES

The list given below indicates, first, the county in which are situated the premises on which disease has been confirmed, followed by the postal address and date of outbreak.

SHEEP SCAB:

Cumberland.—Brotherelkeld Farm, Boot, Holmrook (Dec. 3rd).

Yorks, W.R.—Tillotson's Farm, Cononley, Keighly, Yorks (Dec. 3rd).

CORRESPONDENCE

The views expressed in letters addressed to the Editor represent the personal opinions of the writer only and their publication does not imply endorsement by the N.V.M.A.

SULPHAMEZATHINE TREATMENT OF CALF DIPHTHERIA

Sir,—Having just read the abstract in to-day's issue of the *Record* concerning sulphamezathine treatment of calf diphtheria, I should like to mention that I consider a single dose of this drug, given by intravenous injection, will cure the majority of cases, and is apparently more efficient than oral administration. I am not claiming this technique to be original.

Using sulphamezathine sodium solution, 33⅓ per cent., a dose of at least 10 c.c. per cwt. is diluted with 5 to 10 oz. sterile water and administered by means of a flutter valve apparatus.

Yours faithfully,

38, High Street, H. NORMAN BATEMAN.
Wickham Market, Suffolk.

December 3rd, 1949.

ANIMAL HUSBANDRY LECTURESHIPS

Sir,—On August 27th, an advertisement appeared in the *Record*, inviting application for the post of lecturer in animal husbandry at the University of Bristol. Then Mr. John C. Grant, in a letter the following week, deplored the fact that it invited application from persons outside the profession. Mr. Paul Crosfield adequately defended the move.

Now this week we see an advertisement for a similar post at the Royal Veterinary College, but strictly within the profession. However, it invites final year students or newly qualified to apply. With all due respect to these students, what can they have learnt, or hope to be able to teach their fellows? Such as it is, of course, the post may have a veterinary bias.

By all means keep such teaching within the profession, but by fully capable members which I am sure it contains, and not by newly qualified persons whose general outlook is certainly hazy and much more restricted than that of many able laymen.

Perhaps, however, it is only the newly qualified that such a humble salary will attract, but this is another matter.

Yours faithfully,

East Street, P. D. G. BOWEN.
Rochford,
Essex.

December 4th, 1949.

* * * * *

UNDULANT FEVER

Sir,—You may consider it of sufficient interest to other members of the profession to publish the fact that, having contracted undulant fever, after one week I was asked to undergo streptomycin treatment. I declined and was back at work in three days.

I wonder, was it really chloromycetin that cured Mr. Owen?

Yours faithfully,

Scriven House, M. A. HORROX.
Harrogate.

December 4th, 1949.

Conditions Governing Acceptance of Display Advertisements in "The Veterinary Record"

1. The Association cannot be regarded as approving the subject matter of any advertisements; nor is it a function of the Association to test the validity of advertised matter other than as outlined below.

2. The Association reserves the right to refuse publication of any advertisement without disclosing reasons to the advertisers.

3. Supply of prophylactic or therapeutic agents for veterinary purposes direct to the lay public may be regarded as adequate reason for refusing publication of any or all advertisements submitted by the firm concerned.

4. The general nature of prophylactic or therapeutic agents should be stated as part of the advertisement.

5. If any specific claims are made by the advertiser in relation to any product, they should be stated, briefly, or at length, as part of the advertisement and should be in reasonable accord with claims published elsewhere or commonly associated with the product.

6. In the case of new products, any claims of an unusual or important nature should be supported by positive evidence that the product is worthy of extensive field use.

7. If adequate evidence becomes available which indicates that claims made in respect of an advertised product are ill-founded, misleading or extravagant, reasonable notice will be given to the advertiser either to terminate publication in *The Veterinary Record* or to amend the wording of any claim made therein and elsewhere to the satisfaction of the Association.

8. "Copy" for all advertisements to be submitted for acceptance well in advance of publication (Press day: Wednesday), to the Editor, *The Veterinary Record*, 36, Gordon Square, W.C.1.